

REFERENCE DEPARTMENT



BOOK NO.

ACCESSION

913.42 Ar22⁷⁹

443955

NOT TO BE TAKEN FROM THE LIBRARY

Form 37 10M 11-35

SAN FRANCISCO PUBLIC LIBRARY



3 1223 04021 0032

ARCHAEOLOGIA
OR
MISCELLANEOUS TRACTS
RELATING TO
ANTIQUITY

ARCHAEOLOGIA
OR
MISCELLANEOUS TRACTS

RELATING TO
ANTIQUITY

PUBLISHED BY THE
SOCIETY OF ANTIQUARIES OF LONDON

VOLUME LXXIX



PRINTED AT OXFORD

BY JOHN JOHNSON FOR

THE SOCIETY OF ANTIQUARIES

AND SOLD AT THE SOCIETY'S APARTMENTS IN BURLINGTON HOUSE, LONDON

MCM XXIX

x913.42
An 22 79

443955

1913.42

ARCHAEOLOGIA
OR
MISCELLANEOUS TRACTS
RELATING TO
ANTIQUITY

PUBLISHED BY THE
SOCIETY OF ANTIQUARIES OF LONDON
SECOND SERIES: VOLUME XXIX



PRINTED AT OXFORD
BY JOHN JOHNSON FOR
THE SOCIETY OF ANTIQUARIES
AND SOLD AT THE SOCIETY'S APARTMENTS IN BURLINGTON HOUSE, LONDON
MCM XXIX

TABLE OF CONTENTS

	PAGE
I.— <i>Celtic Bronzes from Lorraine.</i> By REGINALD A. SMITH, Esq., Vice-President	1-12
II.— <i>Some Aspects of the Craft of the Armourer.</i> By CHARLES FFOULKES, Esq., O.B.E., B.Litt., F.S.A.	13-28
III.— <i>The Iconography of St. Thomas of Canterbury.</i> By TANCRED BORENIUS, Esq., Ph.D., D.Lit.	29-54
IV.— <i>The Uranical Astrolabe and other Inventions of John Blagrave of Reading.</i> By DR. R. T. GUNTHER, M.A.	55-72
V.— <i>Roof Bosses in the Nave of Tewkesbury Abbey.</i> By C. J. P. CAVE, Esq., M.A., F.S.A.	73-84
VI.— <i>Corfe Castle: its history, construction, and present condition.</i> By SIDNEY TOY, Esq., F.S.A., F.R.I.B.A.	85-102
VII.— <i>The Excavations on the Temple of Nabû at Nineveh.</i> By R. CAMPBELL THOMPSON, Esq., M.A., D.Litt., F.S.A., Fellow of Merton College, Oxford, and R. W. HUTCHINSON, Esq., M.A., F.S.A.	103-148
VIII.— <i>The Epigraphy of Medieval English Seals.</i> By H. S. KINGSFORD, Esq., M.A., Assistant Secretary	149-178
IX.— <i>Some Further Letters of Fraternity.</i> By the Rev. Prebendary CLARK- MAXWELL, M.A., F.S.A.	179-216
X.— <i>Notes on the Armour of the Maximilian Period and the Italian Wars.</i> By J. G. MANN, Esq., M.A., B.Litt., F.S.A.	217-244
INDEX	245-256

LIST OF ILLUSTRATIONS

PLATE		PAGE
CELTIC BRONZES FROM LORRAINE:		
I.	1. Bronze wine-jar (<i>stamnos</i>), Bouzonville. 2. Bronze wine-jar (<i>stamnos</i>), Bouzonville	between 4 and 5
	Fig. 3. Detail of ornament on foot of <i>stamnos</i> (fig. 2)	2
II.	4. Bronze flagon, inlaid with coral and enamel, Bouzonville. 5. Coral inlay on foot of flagon. 7. Enamelled lion on lip of flagon (fig. 4). 8. Base of handle and lid of flagon	}
III.	6. Top view of flagon (fig. 10) showing spout. 9. Throat of flagon (fig. 10) inlaid with coral	between 4 and 5
IV.	10. Bronze flagon inlaid with coral and enamel, Bouzonville. 11. Coral inlay on foot of flagon (fig. 10). 12. Pottery urn, Le Mesnil-les-Hurlus, Marne. 13. Lion handle of a flagon, Borscher Aue, Geisa	}
	Fig. 14. Top and side views of enamelled lid of flagon (fig. 4)	7
SOME ASPECTS OF THE CRAFT OF THE ARMOURER:		
V.	1. Duke William—Bayeux Tapestry. 2. Saul defeating the Ammonites: 13th-century MS. in the possession of Mr. Pierpont Morgan	facing 16
	Fig. 3. Mounted Archer, 13th century. Roy. MS. 20, D. 1, fol. 127	16
	Fig. 4. Sir John de Creke, c. 1325: Westley Waterless, Camb. 5. A knight, c. 1400; Laughton, Lincs.	17
	Fig. 6. Bascinet, early 15th century: Wallace Collection. 7. Sallade, 15th century: Tower of London. 8. Armet, early 16th century. 9. Close Helmet, early 16th century: Tower of London. 10. Thos. Quatremaÿns, c. 1460: Thame, Oxon	18
	Fig. 11. Detail of Jack: A. Outside; B. Inside. 12. Jack, ch��sse of St. Ursula, 15th century: Bruges	19
	Fig. 13. Brigandine: Vienna. 14. St. George of Prague, 1375	20
	Fig. 15. Gunther von Schwartzburg, 1349: Frankfort-am-Main. 16. The 'Brocas' helm, 15th to 16th century: Tower of London	22
	Fig. 17. Pauldrons: A. Statue of Colleoni, Venice; B. Missaglia armour, Vienna. 18. Solleret: practical, unpractical	23
	Fig. 19. Harnisch-Meister Albrecht, 1480: Vienna. 20. The Emperor Maximilian I	26
	Fig. 21. Three-quarter suit 'slashed armour'	27
VI.	22. Richard Beauchamp, earl of Warwick, c. 1454, St. Mary's, Warwick. 23. 'Maximilian' armour, c. 1530, N��rnberg. 24. Sigismund of Tirol, 1427-96, Vienna	facing 28

PLATE		PAGE
VII.	25. Jousting armour of Henry VIII, Tower of London	
VIII.	26. Armour of Robert Dudley, earl of Leicester, Greenwich school, late 16th century, Tower of London. 27. North Italian armour, late 16th century, Tower of London. 28. Helmet of Prince Charles, <i>c.</i> 1611: Tower of London	} between 28-9
THE ICONOGRAPHY OF ST. THOMAS OF CANTERBURY:		
	Figs. 1-9. Medieval pilgrims' signs and badges, in pewter and lead	33
	Fig. 10. Wall-painting formerly in the church of Stoke d'Abernon, Surrey	37
	Fig. 11. Enamelled châsse, Limoges, 13th century: St. Laurent de Vigean, Mauriac, Cantal	50
IX.	1. Mosaic, Monreale, late 12th century. 2. Fresco, Sacro Speco, Subiaco, <i>c.</i> 1260. 3. High relief, Sens Cathedral, late 12th century. 4. Statue on the front of Wells Cathedral, 13th century. 5. Statue in carved wood, Historical Museum, Stockholm, North German, <i>c.</i> 1475. 6. Stained-glass fragment, Fairford, 14th century. 7. (a) Anonymous etching, 17th century; (b) Etching by W. Hollar facing	30
X.	1. Picture by Timoteo Viti, Duomo at Urbino, 1504. 2. Picture by Girolamo da Santa Croce, San Silvestro, Venice, 1520. 3. Picture by Felice Brusa- sorzi, San Tommaso Cantuariense, Verona, 1579 facing	31
XI.	1. Picture by Girolamo da Treviso (1499-1544), San Salvatore, Bologna. 2. Picture by Durante Alberti (1548-1613), Venerable English College, Rome	
XII.	Illuminations illustrating 'A Life of St. Thomas Becket', possibly school of Matthew Paris, <i>c.</i> 1230-50. 1. Expulsion of St. Thomas's kindred—St. Thomas lying ill from starvation. 2. Parting of St. Thomas and Pope Alexander III. 3. St. Thomas pronouncing sentence of excommunication—St. Thomas addressing Henry II and Louis VII. 4. Parting of St. Thomas and the two kings. 5. Coronation of Henry, the king's son—Coronation banquet. 6. The news of the coronation reaches St. Thomas and the Pope. 7. St. Thomas embarking for England though warned by the count of Boulogne. 8. St. Thomas landing at Sandwich	} between 36-7
XIII.	1. Stained-glass window, Chartres Cathedral, <i>c.</i> 1206. 2. The Martyrdom of St. Thomas Becket: detail of Chartres stained- glass window, <i>c.</i> 1206. 3. Wall-paintings, St. Mary's church, Stow, Lincolnshire. 4. Wall-paintings, Brunswick Cathedral, first half of 13th century	
XIV.	1. Engraving, dating from 1731, of the 'Thomasaltar' by Meister Francke (1434). 2. The mob insulting St. Thomas Becket, by Meister Francke: Kunsthalle, Hamburg. 3. The Martyrdom of St. Thomas Becket, by Meister Francke: Kunsthalle, Hamburg	

LIST OF ILLUSTRATIONS

xi

PLATE		PAGE
XV.	Altar-piece, church of St. Jürgen, Wismar, Mecklenburg, late 15th century. 1. The three St. Thomases and scenes from the life of St. Thomas Aquinas. 2. Scenes from the lives of St. Thomas the Apostle and St. Thomas Becket facing	42
XVI.	1. Counter-seal of Hubert Walter, archbishop of Canterbury 1193-1205. 2. Counter-seal of Stephen Langton, archbishop of Canterbury 1207-28. 3. Counter-seal of Richard Grant, archbishop of Canterbury 1229-31. 4. Counter-seal of Edmund Rich, archbishop of Canterbury 1233-40. 5. Seal of Thomas Arundel, archbishop of Canterbury 1397-1419. 6. Seal of the Prerogative Court of Archbishop Wareham, 1504-32. 7. Seal of the Prerogative Court of Cardinal Pole, 1555-8. 8. Seal of the Prerogative Court of Archbishop Cranmer, <i>sede vacante</i> during his imprisonment (1553-5). 9. Seal of Arbroath Abbey, Angus (13th century). 10. Reverse of the third seal of the Cathedral Priory of Canterbury, 1233 facing	43
XVII.	1. Tympanum, Bayeux Cathedral, late 13th century. 2. Reliquary, Heidal, Valdres, Norway, <i>c.</i> 1250. 3. Ceiling boss, Exeter Cathedral, 14th century. 4. Font, Lyngsjö, Sweden, 1190-1200. 5. Bas-relief, North door, Chartres Cathedral, <i>c.</i> 1250 facing	46
XVIII.	1. Alabaster table, British Museum, 15th century. 2. Ivory plaque, Victoria and Albert Museum, 14th century. 3. Leaf of ivory diptych, Victoria and Albert Museum, 14th century. 4. Leaf of ivory diptych, late Homberg Collection, 14th century. 5. Embroidered mitre, Munich, Bavarian National Museum, 14th century. 6. Woodcut, William Caxton's <i>Golden Legend</i> , 1483 facing	47
XIX.	Enamelled châsses, Limoges, 13th century: 1. Sens Cathedral. 2. London, Society of Antiquaries. 3. Hereford Cathedral. 4. Trönö, Sweden	between 52-3
XX.	Enamelled châsses, Limoges, 13th century: 1. Lyons Museum. 2. British Museum. 3. Paris, Musée de Cluny	
XXI.	Illuminations. 1. British Museum, Harl. 5102, English, 1190-1200. 2. Carrow Psalter, English, <i>c.</i> 1233-50. 3. British Museum, Add. 17012, Flemish, <i>c.</i> 1500. 4. British Museum, King's 9, Flemish, <i>c.</i> 1500	
XXII.	1. Fresco, SS. Giovanni e Paolo, Spoleto, late 12th century. 2. Wall-painting, Burlingham St. Edmund, 15th century. 3. Wall-painting, Bramley church, Hants, <i>c.</i> 1300. 4. Wall-painting, Pickering church, Yorks., 15th century	
THE URANICAL ASTROLABE AND OTHER INVENTIONS OF JOHN BLAGRAVE OF READING:		
	Fig. 1. Armillary Sphere engraved and signed by Blagrove. From the title-page of the <i>Mathematical Jewel</i>	57

LIST OF ILLUSTRATIONS

PLATE	PAGE
Fig. 2. Label and Rule of the <i>Mathematical Jewel</i>	59
Fig. 3. The Base-plate or 'Mater' of Blagrave's Astrolabe	60
Fig. 4. The Rete of Blagrave's Astrolabe	61
Fig. 5. Blagrave's 'Instrument of three streight Rules, better than any Compasses to describe any Arch with be his center neuer so farre off'. <i>Mathematical Jewel</i> , p. 65	62
Fig. 6. Blagrave's Familiar Staffe, 1590	63
XXIII. The Zenitfer and Celestial of Blagrave's Uranical Astrolabe, 1596 between 64 and 65	
Fig. 7. Blagrave's method of drawing the Meridian Line in the Night by the Pole Star. <i>Art of Dyalling</i> , 1609, p. 73	70
Fig. 8. Diallist noting 'the scituation of a wall to finde how much he declineth'. The building represented may have been Blagrave's own house. <i>Mathematical Jewel</i> , p. 101	71
Fig. 9. Engraved title to J. Palmer's <i>Mathematical Jewel</i> , 1658, with portraits of Blagrave and Palmer	72
ROOF BOSSES IN THE NAVE OF TEWKESBURY ABBEY:	
XXIV. 1-2. Censing angels. 3-5. Harps. 6. Citole. 7-8. Gittrens. 9. Guitar fiddle	} between 76-7
XXV. 1. Symphony. 2. Psaltery. 3. Portative Organ. 4. Bagpipe. 5. Shawm. 6. Pipe and tabor. 7. Tabor. 8. Timbrel. 9. Cymbals	
XXVI. 1-4. Passion angels. 5. St. John. 6. St. Matthew. 7. St. Mark. 8. St. Luke	
XXVII. 1. The Nativity. 2. The Circumcision (?). 3. The Journey of the Magi	
XXVIII. 1. The Adoration of the Magi. 2. The Finding in the Temple. 3. The Entry into Jerusalem. 4. The Last Supper	facing 78
XXIX. 1. The Betrayal. 2. The Scourging. 3. The Crucifixion. 4. The Resurrection	facing 79
XXX. 1. The Ascension. 2. Pentecost. 3. The Coronation of the Virgin. 4. God the Father	facing 82
CORFE CASTLE: ITS HISTORY, CONSTRUCTION, AND PRESENT CONDITION:	
XXXI. 1. Corfe Castle from the west. 2. Corfe Castle from the south facing	86
XXXII. 1. Corfe Castle from the east. 2. Plan of Corfe Castle, drawn by Ralph Treswell, 1586	facing 87
XXXIII. Corfe Castle: the Keep	between 88 and 89
XXXIV. 1. The Middle Gateway. 2. The Keep, fragment of east wall: exterior. 3. The Keep, fragment of west wall, showing entrance from fore-	

LIST OF ILLUSTRATIONS

xiii

PLATE		PAGE
	building into hall and vault over the rampart walk. 4. The Keep, fragment of east wall: interior, showing remains of upper doorway, gutter, and parapet facing	90
XXXV.	1. The Inner Bailey from the west, showing fragments of the bailey wall and of the east and west walls of the Keep. 2. Window of hall, converted into a doorway. 3. The Keep: newel-stairway from hall to parapet. 4. The Keep: the south wall, interior facing	91
XXXVI.	1. Fireplace, rebuilt in cottage at south of village. 2. The Keep: vault over rampart-walk, from the east. 3. Plokenet shield on east face of the Plokenet tower facing	94
XXXVII.	Corfe Castle: the Hall and Chapel between 96 and 97	
XXXVIII.	1. The Long Hall from the west. 2. The Long Hall from the east. 3. Tower in north wall of the Middle Bailey: interior facing	98
XXXIX.	1. The Keep, the Middle Gateway, and John's Ditch. 2. The Outer Gateway facing	99
XL.	Corfe Castle: Plan of Castle facing	100
	Fig. 1. Map of the Isle of Purbeck	86
	Fig. 2. Plan of Corfe Castle and environs	87
	Fig. 3. Corfe Castle and environs, drawn by Ralph Treswell, 1585	89
	Fig. 4. A window of the Early Norman wall in the Middle Bailey	95
	Fig. 5. Entrance to the porch of the Long Hall	97
	Fig. 6. The Middle Gateway	98
	Fig. 7. Detail plans of the Gateways	99
	Fig. 8. The Outer Gateway with the adjoining tower and wall chamber	101

THE EXCAVATIONS ON THE TEMPLE OF NABÛ AT NINEVEH:

	Fig. 1. The Agammu Pool	115
	Fig. 2. Stone and faience beads	143
	Fig. 3. Faience and frit beads	144
	Fig. 4. Glass beads	145
	Fig. 5. Ivory and stone beads	146
	Fig. 6. Shell beads	147
XLI.	Inscriptions 1-11 facing	118
XLII.	Inscriptions 12-43 facing	119
XLIII.	Inscriptions 44-55 facing	122
XLIV.	Inscriptions 56-68 facing	123
XLV.	Inscriptions 69-86 facing	124
XLVI.	Inscriptions 87-122 facing	125
XLVII.	Inscriptions 122 B-L facing	128
XLVIII.	Inscription 122 A, cols. I, III, VI facing	129

LIST OF ILLUSTRATIONS

PLATE		PAGE
XLIX.	Inscription 122 A, col. II facing	130
L.	Inscription 122 A, cols. II, continued, and V facing	131
LI.	Inscription 122 A, col. V, continued facing	134
LII.	Inscriptions 122 A, col. VI, continued, and 122 M-Q facing	135
LIII.	Pottery from the Temple Site, and from Sennacherib's House, nos. 123-65 facing	136
LIV.	Pottery from the Temple Site, and from Sennacherib's House, nos. 166-93 facing	137
LV.	Lamps, etc., from the Temple Site, and from Sennacherib's House, nos. 194-237 facing	138
LVI.	Gold, iron, bronze, lead, bone, glass, and stone from the Temple Site, and from Sennacherib's House facing	139
LVII.	Pottery, stone objects, beads, and painted bricks from above or near the Temple Site	
LVIII.	1. Stone work at Ashur for comparison with the dam. 2. Dam at the Agammu pool. 3. Shrine (?). 4. Dam at the Agammu pool. 5. Dam at the Agammu pool. 6. Sculpture of Sennacherib's campaign in the marshes	between 140-1
LIX.	1. Kouyunjik. 2. Guardian deity, probably from Ashurnasirpal's palace. 3. Sargon's pavement. 4. Ashurnasirpal's lion hunt. 5. Ninlil Gate in the walls of Nineveh on the Khosr. 6. Ashurbanipal's pavement	
LX.	Flint and obsidian implements, pottery, etc.	
LXI.	General plan of Nineveh	
LXII.	Plan of the Mound of Kouyunjik	between 142-3
LXIII.	The Temple of Nabû	
LXIV.	The Temple of Nabû: Second-Sixth buildings above the Temple of Nabû	between 148-9
LXV.	The Temple of Nabû: First Building above the Temple of Nabû	

THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS:

Facsimiles of letters and ligatures	166-74
---	--------

SOME FURTHER LETTERS OF FRATERNITY:

LXVI.	Letter of Fraternity from the Brigettines of Syon to the Prior and Convent of Durham facing	179
-------	---	-----

NOTES ON THE ARMOUR OF THE MAXIMILIAN PERIOD AND THE ITALIAN WARS:

LXVII.	1. Tomb of Conrad von Weinsberg, d. 1446: Schöntal on the Jagst,	
--------	--	--

LIST OF ILLUSTRATIONS

XV

PLATE		PAGE
	from a cast in the Germanisches Museum. 2. Tomb of Conrad von Schaumberg, d. 1499, in the Marienkapelle, Würzburg; by Tilman Riemenschneider: in Gothic armour. 3. Tomb of Johann von Bibra, d. 1473, at Bibra, executed about thirty years later by Tilman Riemenschneider: in early Maximilian armour facing	220
LXXVIII.	1. Armour, <i>c.</i> 1500: Wallace Collection. 2-3. North Italian etched breast-plates in the armoury of the Castle of Churburg, <i>c.</i> 1500-10 facing	221
LXXIX.	Specimens of Etching facing	222
LXX.	1. Armour attributed to Charles de Bourbon, Grand Connétable de France, <i>c.</i> 1510-20: Metropolitan Museum, New York. 2. Etched Italian fluted armour, <i>c.</i> 1510-20: Museo Civico, Bologna facing	223
LXXI.	1. Milanese armour, by Negrolì, <i>c.</i> 1510: Musée de l'Armée, Paris. 2. North Italian etched breast-plate and tassets, <i>c.</i> 1500: Historical Museum, Dresden. 3. Armour of Emmanuel the Fortunate, king of Portugal, by Negrolì, <i>c.</i> 1510: Pauilhac collection facing	224
LXXII.	1. Saul with the head of Goliath, by Dosso Dossi: Galleria Borghese, Rome. 2. Admiral Giovanni Moro, by Titian: Kaiser Friedrich Museum, Berlin facing	225
LXXIII.	1. St. Sebastian, from the picture of the Virgin and Child with two saints, by Rondani: Modena, church of St. Peter. 2. Francesco d'Este as St. George, by Dosso Dossi: Brera Gallery, Milan. 3. Breast- and back-plate, probably Italian, <i>c.</i> 1500: Wallace Collection facing	228
LXXIV.	Early Maximilian armour in the Zeughaus, Berlin, from the armoury of Prince Pless facing	229
LXXV.	1. Tomb of Wolfgang von Dalberg, d. 1522: Catholic Church, Oppenheim. 2. Tomb of Conrad von Grumbach, d. 1526: Rimpf. 3. Tomb of Giovanni d'Antonio Maria Sala, d. 1527: Bologna, Museo Civico facing	230
LXXVI.	1. Detail of the Descent from the Cross, by Sodoma: Sienna. Showing hinged side-pieces to the back. 2. Breast-plate of Georges Supersaxo at Sion. 3. Fluted armour with Seusenhofer mark, and hinged side-pieces to the back-plate: Castle of Churburg. 4. German etched breast-plate: Burges Collection, British Museum facing	231
LXXVII.	The development of the fluted bellows helmet facing	232
LXXVIII.	1. Fluted armour with grotesque visor, <i>c.</i> 1520: Kunsthistorisches Museum, Vienna. 2. St. Ursus, from the picture of the Virgin and Saints, by Hans Holbein the Younger, painted in 1522: Solothurn. 3. Fluted German armour, <i>c.</i> 1520-35: Wallace Collection facing	233
LXXIX.	1. Portrait of Joachim, Margrave of Brandenburg, 1520, at the age of 16: Dessau. 2. Portrait of a warrior, by the Master L.S., 1527: Kaiser Friedrich Museum, Berlin facing	236

LIST OF ILLUSTRATIONS

PLATE		PAGE
LXXX.	1. Fluted armour, <i>c.</i> 1515, with 'monkey-faced' helmet: Kunsthistorisches Museum, Vienna. 2. Late fluted armour, <i>c.</i> 1560: Kunsthistorisches Museum, Vienna. 3. Detail of the Judgement of Paris, by Lucas Cranach: Carlsruhe. 4. Fluted and embossed armour, <i>c.</i> 1535: Historical Museum, Dresden facing	237
LXXXI.	1. Flemish tapestry, early 16th century: Museo Municipale, Padua facing	238
LXXXII.	1. St. George and the Dragon, by Leonhard Beck: Kunsthistorisches Museum, Vienna. 2. Tomb of Antoine de Lallaing and his wife: Hoogstraeten facing	239
LXXXIII.	1. Treble thaler of Maximilian I, 1509, the horse with armoured legs. 2. Treble thaler of Ferdinand, 1522, the horse with armoured legs. 3. Brass of Sir Thomas Brooke, d. 1529: Cobham, Kent. 4. Breast-plate attributed to the condottiere Bartolommeo Colleoni, showing etched decoration in the Italian style: Kunsthistorisches Museum, Vienna facing	242

I.—*Celtic Bronzes from Lorraine.* By REGINALD A. SMITH, Esq.,
Vice-President.

Read 21st March 1929

SINCE the purchase of the Morel Collection in 1901 the British Museum has been able to point to the Somme-Bionne chariot-burial as a notable example of the earliest definitely Celtic art of Europe; but a still finer group is now in process of acquisition, and is shown to the Society before passing into the hands of the Trustees. These four remarkable bronze vessels were found buried together on 10th February 1928, during excavations for a cellar on the site of an old abbey at Bouzonville, Lorraine, now in the Département of Moselle. They had been heaped together pell-mell, one of them inverted, without any protection from the soil. Nothing else was found on the spot in spite of careful search, and the bronzes must therefore be regarded as a hoard or treasure, not as the grave-furniture of a Celtic chieftain. It may be a hurried deposit of loot from various sources, but there is nothing to suggest that the four vessels are anything but contemporary. Wine-vessels may be expected in the interment of a chieftain (*Fürstengrab*), but a single wine-jar (*stamnos*) normally accompanies the flagon in such cases (as Weisskirchen, Dürkheim, and Klein-Aspergle). That they were intended to contain wine is inferred from the presence of white pitch or resin (used for flavouring) in the *stamnoi* of Weisskirchen and Klein-Aspergle.¹ Attention has been called to this recently by our Fellow Mr. J. M. de Navarro (*Antiquity*, Dec. 1928, p. 435), who quotes Virgil and Pliny in corroboration of the practice, and points out that the Celtic demand for wine, notorious in the ancient world,² was mainly satisfied by the Rhône-Saône traffic from the Greek port of Marseilles in the sixth and fifth centuries before our era.

The large wine-jar (fig. 1) was slightly damaged in excavating, before the nature of the deposit became manifest, but has been repaired and was, like the others, complete. It is devoid of ornament, 16½ in. high, with a pair of projecting handles below the shoulder, attached by leaf-like expansions of the ends. The metal is thin and beautifully patinated, and the flowing outline is more Greek than Celtic, well made but not extraordinary.

The other *stamnos* (fig. 2) is heavier though only 15 in. high, and the orna-

¹ Déchelette, *Manuel*, ii, 1435.

² Déchelette, *La Collection Millon*, p. 138.

mentation elaborate for this type of vessel. On the returned lip is a fine central beading, and round the base a row of ovolo, with beading within engraved lines above. The handles are grooved and beaded longitudinally and in the centre transversely, the attachments having beaded lines suggesting vine-leaves. Almost the entire surface has a deep lustrous patina, the handles



Fig. 3. Detail of ornament on foot of stamnos (fig. 2). ($\frac{1}{2}$)

being more of a golden colour. Though the details are classical, the high shoulder is not a Greek characteristic, and comparison with figs. 4, 10, 12 suggests that this was a Celtic production, closer than usual to a model imported from some Greek centre: a similar treatment of the ovolo (fig. 3) is seen on a Celtic clasp from Nierstein in Rhenish Hesse.¹

Several *stamnoi* are illustrated with details by Déchelette (*La Collection Millon*, pp. 117, 121); and the latter one from Bouzonville has some resemblance to that from Montefortino near Arcevia in N. Italy. The other has parallels in the well-known examples from Weisskirchen and Klein-Aspergle. One from Dürkheim in the Rhenish Palatinate is more angular, but retains its conical cover, and was found with its tripod,² proving the ceremonial use of these vessels. The find is dated well before 500 by Reinecke,³ and about 480 by Karl Schumacher,⁴ the burial being that of a woman, not as usual of a chieftain.

The principal interest of the discovery lies in the pair of bronze flagons (fig. 4) which are certainly in the front rank of Celtic masterpieces, and embody much of archaeological as well as artistic value. Beaked flagons,⁵ which go by the Greek name of *oinochoae* or more particularly by the German name of *Schnabelkannen*, are of common occurrence in Celtic burials of La Tène I and

¹ Déchelette, *Manuel*, ii, 1238, fig. 525, no. 1.

² Déchelette, *Manuel*, ii, 1066; Lindenschmit, *Alterthümer*, II, ii. 2; Ebert, *Real-Lexikon*, ii, pl. 215.

³ *Zur Kenntniss der La-Tène-Denkmäler der Zone nordwärts der Alpen* (Mainzer Festschrift, 902), p. 54.

⁴ *Siedlungs- und Kulturgeschichte der Rheinlande*, i, 125.

⁵ References for the ordinary type, from sixth- to fifth-century tombs in Italy, are given by Miss G. M. A. Richter (*Greek, Etruscan, and Roman Bronzes*, Metropolitan Museum of Arts, New York, 1915, p. 187).

have been listed in Déchelette's *Manuel*, vol. ii, part 3, p. 1599.¹ The present examples, however, are so much richer and more graceful as to constitute a class by themselves, and though coloured reproductions (as in the *Illustrated London News* of 30th March 1929) would be necessary to convey their original appearance, the detailed photographs will give a clue to their artistic descent and open up some problems of transmission.

The vessels are a pair, and their original appearance can be realized by comparing the two. The high angular shoulder has been already referred to as a non-Greek element, and the elongated body gives a peculiar elegance to the outline, perhaps at the expense of stability.

The better preserved (fig. 4) is 15½ in. high to the extremity of the spout, the maximum diameter 7·7 in. and diameter of foot 4·2 in.: the base is concave, having a central collet enclosed by a raised band, with a pin in the middle for attaching a coral stud 0·6 in. in diameter. The decoration of the foot is enhanced by the severe simplicity of the body from the neck downwards. Here between narrow bands of engraved cable-pattern or running scrolls is an applied openwork bronze plate, enclosing coral in two rows of oblong panels,² alternating with engraved ring-and-dot pattern, and in the middle a guilloche or two-strand twist of coral on a ground incised to follow the outlines and fill the spaces. Some of the coral inlay has been lost, but the technique is illustrated in fig. 5, and some of the inlay retains the original pink, most having been bleached to a creamy colour. Above the angular shoulder the neck is cylindrical till it expands into a flat rim and broad flat beak, along the middle of which runs a tube opening at the top end in front of a duck moulded in the round. This is 0·7 in. long, the body being spotted and the eyes originally inlaid with coral. The upper surface of the spout is engraved with an angular guilloche on a dotted ground (fig. 6), and seven circular collets are here visible which were originally filled with bosses of coral, the same material being inlaid in oblong sockets round the mouth, outside the lip, and along the line of the spout. Lying on either side of the mouth is a quadruped (which may be a lion, as a mane is indicated), with spiral lines on the fore-quarters (fig. 7), the eyes originally set with coral and the back with sunk or *champlevé* enamel, red like that on the lid, which is attached to the handle by a chain.³

¹ *Stamnoi* are also included in this list, which gives the leading references to finds before the date of publication (1914). His description of the Millon collection was published in the preceding year, and contains coloured illustrations of the bronzes and Greek pottery from La Motte St.-Valentin, Haute-Marne.

² As on the Weisskirchen clasp, said to have been filled with enamel (Lindenschmit, *Alterthümer*, II, iv, pl. 2, fig. 7; Déchelette, *Manuel*, ii, 1238, fig. 525, no. 4).

³ Like the lid of a flagon with cylindrical spout from Le Catillon, St. Jean-sur-Tourbe, Marne (Déchelette, *Manuel*, ii, 1451).

A similar but larger animal forms the handle: it is decorated in the same manner and ends below in a pattern derived from the Greek palmette above a grotesque human face with coral eyes, minus one of the settings (fig. 8). This exemplifies the inability or unwillingness of Celtic craftsmen to portray the human features; and the terminal recalls the head of a satyr or other mythological being often seen in that position on Greek bronze vessels of the classical period.¹ Celtic masks of about the same date are illustrated by Déchelette (*Manuel*, ii, 1238, 1335, 1432).

The throat of both flagons, from the spring of the neck almost to the end of the spout, is enriched with coral inlaid in a delicate bronze openwork frame, the pattern consisting of debased palmettes relieved in the centre by a chequer of coral and bronze squares, the latter engraved with the Greek fret or key pattern (fig. 9). On either side can be seen empty collets, once filled with coral bosses. A somewhat similar design, with spirals instead of chequer, is seen near the point of the bronze mount of a chariot-pole from La Bouvandau, Marne.² Bronze openwork³ was popular among the Celts, but according to Déchelette was not a native invention, Campania being suggested as the place of origin. Conjoined palmettes, one above the other, are frequently found round the cylindrical necks of black-figure Greek amphorae of the sixth century, and need not be traced farther.

The second flagon (fig. 10) measures 15.9 in. to the top of the spout, and though the enamel on the lid is superficially decayed, the coral on the throat (fig. 9) is in better order than on the first, and many pieces of inlay at the foot are still pinkish. The only point of difference is that the interstices of the coral inlay at the foot are engraved with a curl within pointed ovals (compare figs. 5 and 11). The junction of the two ends of the openwork frame is seen in the latter figure.

Like the mouth of the spout, the opening for filling below the lid is very small (1 in. in diameter) in proportion; and in both flagons there are two opposite notches in the edge of this opening. There are no corresponding projections on the lid, and, as a funnel would be necessary for filling, the notches were no doubt to facilitate filling by letting out air. There is no trace of any locking arrangement, and the lid would be held only by the chain, as there is no rebate on the rim.

A vase with the same graceful and angular profile came with the Morel

¹ A. de Ridder, *Bronzes antiques du Louvre*, ii, pls. 100, 101: some with couchant lions. See also Babelon and Blanchet, *Bronzes antiques de la Bibliothèque Nationale*, pp. 582-4.

² Déchelette, *Manuel*, ii, 1191, fig. 505; 1514, fig. 692.

³ A good example from the Somme-Bionne chariot-burial (Brit. Mus. *Early Iron Age Guide*, 2nd ed., pl. iv; Déchelette, *Manuel*, ii, 1524).



Fig. 1. Bronze wine-jar (*stamnos*), Bouzoville (about 1)



Fig. 2. Bronze wine-jar (*stamnos*), Bouzoville (1)

Published by the Society of Antiquaries of London, 1929

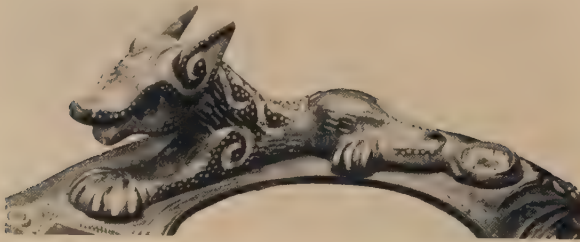


Fig. 7. Enamelled lion on lip of flagon (fig. 4) ($\frac{1}{3}$)



Fig. 8. Base of handle and lid of flagon (fig. 4) ($\frac{1}{3}$)



Fig. 4. Bronze flagon, inlaid with coral and enamel, Bouzonville ($\frac{1}{3}$)



Fig. 5. Coral inlay on foot of flagon (fig. 4) ($\frac{1}{3}$)



Fig. 6. Top view of flagon (fig. 10) showing spout (†)

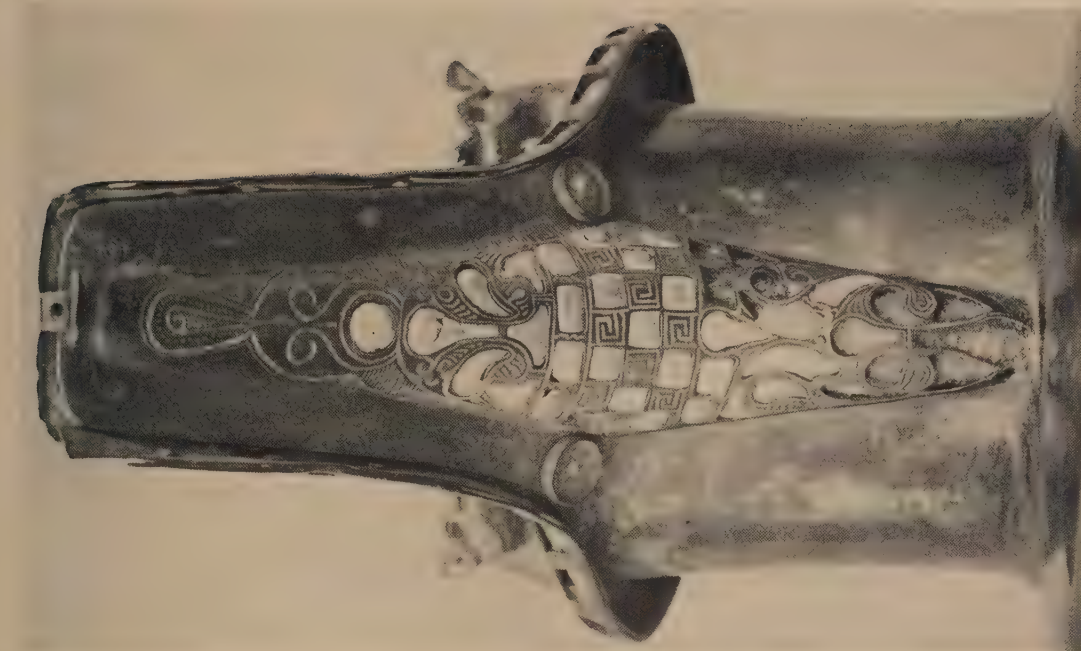


Fig. 9. Throat of flagon (fig. 10) inlaid with coral (†)

Published by the Society of Antiquaries of London, 1929



Fig. 10. Bronze flagon, inlaid with coral and enamel, Bouzonville ($\frac{1}{3}$)



Fig. 13. Lion handle of a flagon, Borscher Aue, Geisa ($\frac{1}{2}$)



Fig. 11. Coral inlay on foot of flagon (fig. 10) ($\frac{1}{3}$)



Fig. 12. Pottery urn, Le Mesnil-les-Hurlus, Marne ($\frac{1}{3}$)

Collection to the British Museum in 1901, and is here represented by a diagram (fig. 12), a photograph being included among the Gaulish pottery in the *Early Iron Age Guide*, 2nd ed., pl. v, no. 12.¹ It is 10 in. high, of dark brown to black ware with lustrous surface and freehand grooves on the neck and pedestal-foot, the shoulder being sharp and evidently copied from a bronze model, such as the Bouzonville pair of flagons. It was found in a woman's grave at Le Mesnil-les-Hurlus, Dépt. Marne, with another urn of spheroid form (*Proceedings*, xxvi, 132, fig. 5), a bronze torc and pair of armlets, two La Tène I brooches (one set with coral), and a gold finger-ring (Morel, *Album*, pl. 41, nos. 1-8; *La Champagne souterraine*, p. 180). Déchelette has a note on the possible significance of the gold ring (*Manuel*, ii, p. 1265), and the torc is a fine example, with pairs of S-scrolls in relief.

The duck modelled in the round just above the outlet of the spout of both flagons is evidently significant, and can be traced back for centuries as a religious symbol.² As an aquatic bird it may have been regarded as the incarnation of a water-spirit, and is here seen presiding over the circulation of a more precious liquid. A similar casting was found with (but not attached to) a beaked flagon bearing a stiff palmette of early form somewhere on the middle Rhine;³ and Messrs. J. N. L. Myres and Hawkes found another in excavating the Early Iron Age earthwork on St. Catherine's Hill outside Winchester.

It is more than likely that the coral came from the Hyères islands (Stoechades) off Toulon, which would suggest manufacture in or under the influence of the Phocæan colony of Massilia (founded about 600 B.C.); but it is important to remember that this material was freely used for ornamental purposes during the last phase of the Hallstatt period in central Europe. The trade in coral has been described by M. Salomon Reinach,⁴ whose views are summarized in our *Proceedings*, xxii, 139. Its vogue in Gaul lasted from the fifth to the third century B.C., and the best known examples are from the Marne area, especially the chariot-burials of Gorge Meillet and Somme-Bionne. Pliny states that the Indians were extremely fond of coral on account of its prophylactic virtues, and adds that before the Indian demand arose the Gauls used to ornament their swords, bucklers, and helmets with coral; but in his own day exportation had rendered this material so rare that it was seldom seen in the countries that produced it. The Gorge Meillet, Cuperly, and

¹ Other forms are sketched in Ebert's *Real-Lexikon*, iv, pl. 69.

² Riegler, 'Ente als Seelenvogel', in *Archiv für Religionswissenschaft*, xxiii, Heft 1/2, 1925, p. 164, emphasizes its importance in folk-lore; and Déchelette dealt with it archaeologically in *Revue Archéologique*, 1909, vol. xiv ('Le culte du soleil aux temps préhistoriques').

³ Lindenschmit, *Alterthümer*, 3, 3, 2, 7, figs. 5a and b.

⁴ *Revue Celtique*, xx (1899), 13, 117; *Revue Archéologique*, 1905, vol. vi, 309.

Berru helmets have coral at the top, and the Witham shield has well-preserved studs of the same material, but the same limitations of date do not seem to apply to Britain. The following examples are all probably later than 250 B. C. and show that there was a considerable stock of coral on this side of the Channel when Gaul was obliged to find a substitute: studs from the warrior's grave at Grimthorpe, E. R. Yorks. (Brit. Mus. *Early Iron Age Guide*, 2nd ed., p. 114); a bronze bowl with stud from Colchester (*Proceedings*, xx, 214-15); brooch from Harborough Cave, Derbyshire (*Proceedings*, xxii, 142); pins from the Thames at Hammersmith (*Archaeologia*, lx, 271, fig. 18) and from Danes Graves, Kilham, E. R., Yorks. (*Archaeologia*, lx, 269, fig. 17). Two coral necklaces of the Roman period have been found in Britain, at Rushmore (Pitt-Rivers, vol. i, pl. XLIV, no. 19) and Padstow (*Arch. Journ.*, xvii, 315); and an engraved branch of coral is published from Cold Kitchen Hill (*Wilts. Arch. Mag.*, xxvii, 287). The continental distribution of this material is discussed in *L'Anthropologie*, x (1899), 677.

The beaked flagon is evidently derived from the Greek jug with trefoil lip, a well-known type found in the late Hallstatt period, for instance, at Vilsingen (Hohenzollern)¹ and Pertuis (Vaucluse).² In Celtic hands the form was distorted, and the stage reached about 480 B. C. is shown by the Weisskirchen grave-find near Merzig (Rhenish province), the flagon having an ovoid body, a plain handle with its lower attachment in the form of a palmette with broad scrolls flanked by two hinds, and the limbs round the rim terminating in lions or other animals moulded in the round. This, again, was a classical feature, and in the national collection are loose handles ending in most realistic lions on the rim; some with nude human figures bent backwards for the grip (as on the Schwarzenbach flagon), and masks below, flanked by smaller animals. A debased example from Italy is figured by Lindenschmit (*Alterthümer*, I, ii, pl. 3, no. 2).

There are several beaked flagons with the orthodox stiff palmette for attaching the handle, of the Somme-Bionne type, some with terminals in the form of animal heads no larger than the arms embracing the rim. An interesting example of such terminals is illustrated (fig. 13) from the Borscher Aue near Geisa in Saxe-Weimar, where the lions on the rim are represented by grotesque pointed heads, evidently some way from the original, but the grip is in the form of a quadruped resembling those in the same position on the Lorraine flagons. It is briefly described by Paul Reinecke,³ and in the

¹ Lindenschmit, *Alterthümer*, v, pl. 56, no. 1035 (seventh cent. B. C.).

² Déchelette, *Manuel*, ii, 787.

³ *Mainzer Festschrift*, 1902 (*La Tène Denkmäler*, &c., p. 72). The illustration is from his pl. vi, fig. 1; but another, with the beaked flagon restored, appears in Jacobsthal and Langsdorff's *Die Bronzeschnabelkannen* (published since this paper was written).

photograph can be discerned the spiral on the hind- (if not also on the fore-) quarters, and a chequer pattern in place of the mane. The grasping fore-paws are here separate, though the hind-paws coalesce as on our specimens; and the thin extended body is strangely like the handles of Bouzonville, forming with them a group that has to be explained. Reinecke states that the hollow

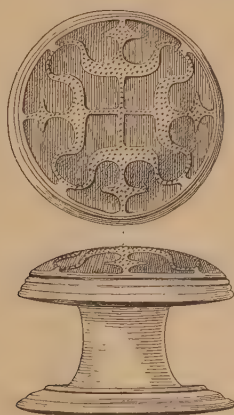


Fig. 14. Top and side views of enamelled lid of flagon (fig. 4). (†)

casting found near Geisa was associated with the remains of a beaked flagon in a barrow (*Grabhügel*); and holds that the prototype was a Greek flagon with a lion as handle. The Celtic craftsman suppressed some details, misunderstood others, and introduced 'barbarian' elements, which show a good deal of refinement and originality.

That the three quadrupeds on the flagons are lions is suggested by a pattern of red enamel in the position of the mane, the long one forming the handle having also enamel in the middle of the back and again below, surmounting the mask. The middle pattern is a simplification of the twin palmette motive seen also on the throat of the flagon, and the animals are covered with short engraved lines representing the pelt. The enamel is of the sunk variety (*champlevé*), broad lines having been cut in the metal and filled with a red vitreous paste fixed by the application of considerable heat. A wet sponge at once restores the original colour, which has been affected by decay and contact with the bronze, and much of the filling has now disappeared. It is, however, intact, though slightly discoloured, on the chained lid of one flagon (fig. 14), which, like the enamel on the animals, is bordered throughout by rows of dots in the bronze. The enamel on the lid of the second flagon has perished, and revealed a clay button or core to which a thin layer of enamel was applied, as on the studs of the Battersea shield in the British Museum. A more extravagant method was to treat the enamel like coral, and fix

hemispheres or buttons of it to bronze by means of a pin through the centre (as on the Bugthorpe discs, Brit. Mus. *Early Iron Age Guide*, 2nd ed., fig. 125).

The openwork frame on the first flagon, which must be of the same thickness as the enamel layer, may therefore be regarded as the forerunner of the swastika-like frame on the bosses of the Battersea shield (*Early Iron Age Guide*, pl. 1).

Enamel was not a classical invention, but derived from inlaid work with precious stones of various colours, the variegated effect being particularly attractive to oriental peoples. The earliest examples of true enamel in Europe are those from Koban, near Vladikavkaz, on the north side of the Caucasus, dated by at least one authority as early as 1300-900 B. C.,¹ and the patterns include grotesque animals in oblong panels, the spiral, swastika, lozenge, and fret patterns,² usually on long plates intended for use as breast-ornaments. The method of sinking grooves for the enamel appears to be identical on the Lorraine flagons and some of the Koban specimens.

Of special interest, therefore, is the association of coral and enamel in work of the fifth century B. C. Though M. Reinach's contention may explain the disappearance of one material and the wide adoption of the other, he freely recognizes that both were in use together at a very early date, long before the conquests of Alexander opened up the Indian market and produced a scarcity of coral in the West.³ The late M. Hubert quoted the burials of La Bouvandau (Somme-Tourbe) and Flavigny as producing enamel in early La Tène times;⁴ but few, if any, specimens have proved the contemporary use of coral and enamel as conclusively as the Bouzonville flagons.

The opinion is hazarded by E. Rademacher⁵ that in the fourth century B. C. the method of fusing glass on metal reached Celtic territory from the neighbourhood of the Black Sea, where Iranian and Scythian art developed on European soil. But if the Lorraine flagons are correctly dated, enamelled objects, if not the art of enamelling, had reached western Europe in the previous century, and even penetrated into the Baltic during La Tène II, as objects ornamented by this method were then plentiful in the island of Gotland.⁶

¹ Ebert's *Real-Lexikon*, vi, 266, cf. vii, pls. 6, 7.

² E. Chantre, *Recherches anthropologiques dans le Caucase*, ii, pls. VIII-XIII, xx bis, LV, LIX.

³ *L'Anthropologie*, x (1899), p. 686.

⁴ *L'Anthropologie*, xiii (1902), p. 71. Flavigny is dated La Tène II by Déchelette, *Manuel*, ii, 1022.

⁵ Ebert's *Real-Lexikon*, iii, 92.

⁶ T. J. Arne in *Studier tillägnade Oscar Montelius*, 1903, p. 121.

Isolated finds in the North German plain do not necessarily imply a Scythian element in the population nor even commercial relations; but the Vettersfeld¹ hoard is not so isolated as it at first appeared, and a connexion between Scythian Russia and the Oder valley is not altogether imaginary. A recent paper by Martin Jahn² on migrations before the Migration period in Silesia postulates an invasion of Scythian horsemen from the south-east about 500 B.C.; but apart from the gold of Vettersfeld most of their relics are weapons, and the main track was between the Oder and the Sudetic mountains. It is less easy to explain any Scythian influences at Geisa (fig. 13), which is about seventy miles north-east of Frankfurt-on-Main and well within the central mountain range of Germany; but the enamelling of the Bouzonville flagons, even apart from the style of the animals so decorated, can hardly be derived from any source in Europe but the Koban district north of the Caucasus. Loot from Silesia, which was invaded by the Celts about 400 B.C., would be later than the Lorraine bronzes.

Another significant detail is the spiral moulded on the fore-quarters and ears of the quadrupeds on the Lorraine flagons. An interesting parallel is the fifth-century brooch from Parsberg, Upper Palatinate³ (twenty miles north-west of Ratisbon), which has, besides grotesque human masks, a pair of lions with spirals on the fore- and hind-quarters. This lasted in Irish manuscripts down to the eighth century, but its origin remains somewhat obscure, as Siberia and China seem to provide the only parallels for the spiral ear.⁴ Bruno Brehm⁵ on Teutonic animal-ornament mentions its occurrence on fabulous monsters in Crete, but traces it to Asia Minor and the Caucasus; and it seems clear that it is related to (perhaps a development of) the comma pattern seen on animal designs of the Near East,⁶ and due originally to the inlay of precious stones in that position. Twenty-seven years ago Mr. Dalton stated that the conventional representation of the musculature was an early method adopted from Assyria and appearing in Achaemenid monumental art, such as the lion frieze at Susa. The whorl, as representing the twist of hair on the body, may

¹ Déchelette, *Manuel*, ii, 758 is the reference most accessible. He considered this and the Vogelgesang ring due to commerce with Scythia (p. 1576).

² *Festgabe für G. Kossinna* (*Mannus*, Ergänzungsband vi), p. 271, giving a map of Scythian finds in East Germany (p. 273): see also *Schlesiens Vorzeit*, neue Folge, ix, 11; and Reinecke in *Zeitschrift für Ethnologie*, 1896, p. 1; *Schlesiens Vorzeit*, vii (1898), 339 (Vogelgesang ring and map).

³ Déchelette, *Manuel*, ii, 1248, fig. 533, no. 1; *Prähistorische Blätter*, xiv (1902), pl. 1.

⁴ See *Antiquaries Journal*, vi, 412, fig. 5; Minns, *Scythians and Greeks*, 251, fig. 172; G. Borovka, *Scythian Art* (trans. V. Gordon Childe), pl. 60, E and G; pl. 72, B (Chinese jade).

⁵ In J. Strzygowski's *Der Norden in der bildenden Kunst Westeuropas—Heidnisches und Christliches um das Jahr 1000*, p. 69.

⁶ O. M. Dalton, *Archaeologia*, lviii, 250, 254; *Cat. Oxus Treasure*, 2nd ed., nos. 11, 44, 45.

have been the naturalistic origin of similar marks placed on the quarters of lions and other beasts in Assyrian and Persian art.

The traditional view that the culture of La Tène reached eastern France from Marseilles along the Rhône valley was contested by Déchelette, but has been lately championed by J. M. de Navarro. On the other hand, Dr. Schuchhardt¹ holds that neither Marseilles nor eastern France was the cradle of the La Tène style, and refers it like Hallstatt to the Danube valley. Its classical elements came not from Greece or Italy direct, but by way of south Russia. He traces the swollen volutes and peculiar animal style to Scythian metal products of Russia, Roumania, and Bulgaria, whence also, at a later date, came the coinage in imitation of Macedonian staters. The pottery types of La Tène are in his opinion organically connected with the Danubian Hallstatt series, and the transformed classical motives of the Marne culture can only be derived from the Danube. Scythian remains are plentiful in Hungary, and a remarkable gold figure of a deer, recently found at Zöldhalompusztá, near Miskolc, is published in Hungarian and French by Nándor Fettich (Fettich Nándor),² with copious notes and references to similar discoveries.

Bouzonville is on the river Nied, a tributary of the Sarre, about 20 miles north-east of Metz, 10 miles west of Sarrelouis, and 33 miles south of Trèves, near the western end of a district that has produced the majority of similar bronzes and may be regarded for this and other reasons as the head-quarters of the Celtic aristocracy in the fifth century before Christ. The area of the Chieftains' graves lies south-west of the great bend in the Rhine at Bingen, and forms almost a triangle between Metz, Mannheim, and Coblenz, the river Moselle being its western boundary. Within the same latitudes other traces of this culture have been recorded in Haute-Marne, Burgundy, Franche-Comté, south Germany, and south-west Bohemia.

Déchelette³ distinguished this original Celtic zone, where the Hallstatt practice of burying the great dead unburnt under barrows (*Hügelgräber*) survived till the fifth century, from the Champagne or Marne area, where barrows are wanting, and the people were not so purely Celtic.⁴ North of this zone discoveries of the Marne type have also been found in northern Bohemia; but south of it the last phase of Hallstatt was prolonged, and the earliest phase of La Tène (Reinecke's La Tène A) is barely represented.

A more precise line of division between the La Tène A area and that of

¹ Ebert's *Real-Lexikon*, iii, 161; and more fully in *Vorgeschichte von Deutschland* (1928), 211.

² *Archaeologia Hungarica*, iii.

³ *Manuel*, vol. ii, p. 1015.

⁴ Map of barrows and flat graves of this period in Ebert's *Real-Lexikon*, iv, pl. 68, see p. 74.

a belated Hallstatt culture is drawn by Karl Schumacher¹ through Hagenau, Rastatt, Stuttgart, and Ulm (that is, through the Black Forest and Würtemberg), and in the last few years the Celtic problem has lost some of its terrors, at least in its geographical aspect. Reference may be made to *Mannus*, Ergänzungsband VI, 258 (Bosch-Gimpera and G. Kraft); *Antiquity*, March 1929 (G. Kraft); Ebert, *Real-Lexikon*, s. v. Kelten (Rademacher). Under the same heading (p. 298) Pokorny states that the original home of the Celts was between the Rhine, the Alps, and the Elbe.

It should be noticed that the area famous for the Chieftains' graves almost coincides with that of the Mehren² group of pottery (Schumacher, *Rheinlande*, i, pl. vii, see pp. 105, 115; Ebert, *Real-Lexikon*, viii, 264, pl. 87), which surrounds the Hunsrück and also passes into the Eifel and beyond the Rhine into the Taunus. The pottery comes from skeleton-graves in barrows, in contrast to the cremated burials in urnfields; and the presence of twisted bronze collars (torcs, *Wendelringe*) dating from the seventh and sixth centuries may indeed suggest a German origin for these people, but also explains to some extent the constant use of these ornaments by the Marne population of La Tène I. Schumacher does not emphasize these coincidences, but points out that the Mehren pottery has elegant profiles which, like the contemporary French ware, betray a strong classical influence; and it is easy to imagine that this area was among the first to be affected by Greek trade up the Rhône and Saône in the fifth century B. C. These two factors—a population accessible to foreign influences, and the opening up of western Europe by the Greeks—may be responsible for the sudden change from Hallstatt to La Tène.

Further research on the Continent may furnish a more precise date for the Bouzonville bronzes, and the tendency certainly is to put back the beginnings of the La Tène culture, Reinecke's La Tène A starting before Déchelette's La Tène I. But at present the date that seems to fit all the conditions best is about 450, which corresponds to that of the Oxus treasure published by our Fellow Mr. Dalton.³ His introduction contains a summary of recent work on the Scythian and cognate questions, and a bibliography is prefixed to Prof. Minns's *Scythians and Greeks*, the latest work on the Scythians being M. Rostovtzeff's *The Animal Style in South Russia and China* (Princeton, 1929). It remains to add that these bronzes were being used (if not made) in Lorraine just at the time that Herodotus was recording all that he knew of the Celts and giving one of the first glimpses of European affairs beyond

¹ Map in *Siedelungs- und Kulturgeschichte der Rheinlande*, pl. 8; see also his article in Ebert's *Real-Lexikon*, viii, 266.

² Mehren is south of Daun, between the Alf and Lieser.

³ *The Treasure of the Oxus*, 2nd ed. (British Museum, 1926).

the Greek area. He would hardly have credited the Barbarians with such a degree of luxury or such lively intercourse with his own people at either end of Europe.

Postscript.—The British Museum owes the acquisition of these bronzes mainly to the good offices of our Fellow Mr. Oscar Raphael and the generosity of Lord Melchett, who advanced the purchase money and made a liberal donation. Other subscribers were Mr. F. A. Szarvasy, Sir Percival David, Mr. C. S. Gulbenkian, Mr. John Hugh Smith, Mr. Lycett Green, Lord Cawdor, F.S.A., Mr. Chester Beatty, F.S.A., and Professor Tancred Borenius. In spite of many heavy calls on their resources, the National Art-Collections Fund completed the purchase with a donation of £500.

II.—*Some Aspects of the Craft of the Armourer.* By
CHARLES FFOULKES, Esq., O.B.E., B.Litt., F.S.A.

Read 18th October 1928

THERE are certain details connected with the craft of the armourer, or rather with his productions, which hitherto have not received the attention which they undoubtedly deserve; for they bear very definitely on the whole subject of military equipment and as such require careful consideration if we are to use sculptured or pictorial contemporary records as illustrations of military operations. Writers on arms and armour have, with few if any exceptions, dealt solely with design and form, and have seldom noticed the reasons why certain types of equipment were introduced; nor have they drawn attention to the many obvious drawbacks or advantages of constructional details which force themselves upon one's notice if the subject is studied from the point of view of the man who wore the armour and had to fight in it.

We have but little information available respecting the making of armour in this country; for our English records consist almost entirely of Bills of Payments with no mention of the technical details which governed the craft. In Germany and Italy the records of the armourers and their craft-guilds are far more complete, but even these provide us with no such wealth of technical detail as we find in the notebooks of Leonardo da Vinci, of Cellini, or of Theophilus. I have recently laid before this Society some notes on the Armourers' Company of London¹ and have dealt with the whole subject of the Craft of the Armourer in a somewhat immature volume published some years ago,² which, in common with all writers on technical subjects, I should wish, in the light of later studies, to rewrite entirely, though I should still be forced to draw the same conclusions.

From the Norman Conquest up to the fifteenth century the armourer as a craftsman in metal does not appear frequently in such records as 'Bills of Payments', 'Craft Regulations', etc., except in the case of the helmsmith. The reason for this is that from the eleventh to the thirteenth century defensive armour consisted mainly of padded garments or leather, or in the case of princes and nobles chain mail, which was probably introduced to Europe from the East. In the fifteenth century the armourer as a metal worker takes his place amongst the other craftsmen, and we find extraordinarily ingenious con-

¹ *Archaeologia*, lxxvi, 41.

² *The Craft of the Armourer*, 1912.

14 SOME ASPECTS OF THE CRAFT OF THE ARMOURER

trivances evolved by which the fighting man is covered with metal plate, so articulated that it conforms as far as possible to his movements. There are but few treatises on the actual working of the metal, and these are all too vague in their details, but from scattered notes it is probable that the best plate armour was forged cold, at any rate in the last stages of the working, and it is needless to say that for a considerable period every piece was made by hand. With the sixteenth century, however, we have certain indications of mass production, for there is a definite statement in Burgmair's *Weisz Kunig* that Maximilian I invented a new art for warriors' armour 'so that in his workshops 30 front pieces and 30 back pieces were made at once'. Now this certainly suggests some method of stamping, otherwise there is no reason for the statement, which seems to be borne out in an account of the battering mills erected at Erith in the year 1624, for the description of the mills is prefaced by the following sentence: 'King Henry VIII being resolved to have his armoury always strong and richly furnished with thirty or forty thousand arms to be in readiness to serve all the necessities of the times caused a great battery mill to be built at Deptford.' Henry VIII was a great personal friend of Maximilian I, and it seems highly probable that the mass-production methods of the Emperor impressed Henry so strongly that he set up mills to work on the same lines in England. Decoration would of course in all the more important armours have been done by skilled craftsmen by etching, engraving, or embossing, but when we find very large numbers of decorated armours still surviving to-day, all the pieces covered with poor designs of precisely the same nature, we are forced to the conclusion that these must have been produced by some system of transfer similar to that used by sword-makers of the present day for embossing their blades. A whole ship-load of this decorated armour (which had its origin in North Italy) was brought from Malta to the Tower in 1826, and is now scattered all over the country. The great number of these pieces which have remained is a sure indication that enormous numbers of these armours must have been produced at the end of the sixteenth century (fig. 27).

Now the function of the armourer was to protect his patron in the best possible manner against all known weapons, and at the same time to allow him to move with as much freedom as was consistent with protection. The death or disablement of a leader might lead to the discomfiture of his army and, with defeat, to the downfall of a kingdom or empire. Therefore we may fairly consider that up to the end of the sixteenth century, at any rate, the armourer was one of the most important factors in the life of the nation. We may remember that at the battle of Hastings a report went through the Norman army that William had been killed, and, to dispel this rumour, he removed his helmet, the broad nasal of which partially hid his face, and rode through the

army to reassure his men (fig. 1). The protection of the fighting man could be arrived at in two ways, either by the thickness of his protective covering or by providing such surfaces as would cause weapons to glance off the wearer, and this, as I shall notice frequently, is the most important quality of defensive armour at its best period.

I do not propose to deal fully with the making of armour, or the methods of construction, or the mills used, for I have dealt with them more or less fully in the work previously referred to, but I shall endeavour to draw attention to certain practical details in military equipment up to the sixteenth century which have not hitherto been seriously noticed by writers on the subject.

All authorities who have dealt with the history of arms and armour, either in published works or in papers read before this Society, have treated only the historical aspect of the subject, and I do not think any of these writers have noticed the extravagances which, either by the design of the armourer or by the whim of his patron, must have frequently nullified the excellent constructive details which are the outstanding features of defensive armour at its best. The simplest and most convenient way of dealing with this aspect of the subject is to note the fundamental laws which govern all craftsmanship, and to show how they are obeyed in the best examples of armour and how they are disregarded by the armourer who has lost his cunning, either wilfully or from force of circumstances.

The craft laws are these :

(1) That the object should be suitable for the purpose for which it is intended.

(2) That it should be convenient in use.

(3) That it should be respectful to the material, and

(4) That all decoration should be subservient to the above rules.

I will take these in order and will give, irrespective of period, examples showing obedience and disobedience to each of the rules.

Purpose. Obviously the purpose of defensive armour is to protect the man, and the object of offensive weapons is to penetrate that defence. With the helmet of the Norman period we have a very practical protection for the head; being conical it provides that essential glancing surface which would deflect the blow of sword or axe, and it is further provided with a broad nasal which protects the nose and to a certain extent the eyes (fig. 1). For some unexplained reason in the thirteenth century this very sensible helmet gave place to what we know as the 'barrel top' helm (fig. 2). As the name implies, this is flat at the top, and there is no attachment to the body, so that it has several drawbacks. First, the full force of a blow received on the top would be felt by the wearer, in spite of the thick padding or lining which was always

worn with these defences. Secondly, a lance blow in front would crush the helm on to the wearer's face, or would turn it round on his head, leaving him at the mercy of his antagonist. The grave difficulties of this helm must have been very soon noticed, although for a time from sculptured and pictorial records it



Fig. 3. Mounted Archer, thirteenth century. Roy. MS. 20, D. 1, fol. 127.

would appear to have been the most popular headpiece all over Europe. Towards the end of the thirteenth century we find the 'sugar loaf' helm, which is far more practical with its conical top (fig. 3). Apparently it rested on the shoulders of the wearer, but whether it was attached or not to his body armour is somewhat uncertain, as the majority of pictorial records show no attachment whatever. This helm was succeeded by the bascinet, a lighter helmet of the same shape but often provided with a large beak-shaped visor, which had the disadvantage of being a projection on which a cutting blow would lodge (fig. 6). In the fifteenth century we have the light but very fairly satisfactory armet (fig. 8), which enclosed the head and had an adequate visor, and a short chain valance at its lower margin to protect the neck. In the same century we find the close-fitting sallade, very similar to the bascinet, heavily lined or padded and in all respects a most practical defence for the head, except, of course, for the face. The tournament helm, it is needless to say, was constructed on entirely different lines. It was only worn for very short periods, and as it was essential that the wearer should be perfectly protected from injury, it was often of great weight and thickness. It was bolted securely to the cuirass, and there was little chance of it ever being dislodged (fig. 16). The body armour as illustrating fulfilment of the purpose for which armour was produced is particularly interesting at all periods. At the Norman period it consisted of padded fabrics, leather and mail, all of these well calculated to protect the wearer from



Fig. 1. Duke William—Bayeux Tapestry



Fig. 2. Saul defeating the Ammonites. Thirteenth-century MS. in the possession of Mr. Pierpont Morgan

the weapons then in use, but none of them providing a glancing surface of any description. As I have stated above, the only worker in metal of the earlier periods was the helmsmith, but with the thirteenth century, as skill of metal



Fig. 4. Sir John de Creke, *circa* 1325.
Westley Waterless, Camb.



Fig. 5. A knight, *circa* 1400.
Laughton, Lincs.

working was developed, we find small additions of plate attached to the mail or quilted defences, generally by laces (fig. 4). These, beginning at the knees, appear subsequently on the elbows, arms, shins, and shoulders; and eventually by the fifteenth century the fighting man is completely encased in articulated plates of metal (fig. 5). Here we see the glancing surface utilized in the best possible manner. There are few projections in which the weapon would lodge; there are no extravagances, and the metal is of sufficient thickness to make it

18 SOME ASPECTS OF THE CRAFT OF THE ARMOURER

rigid and not sufficient to make it unwieldy, as was the case in the seventeenth century when armour was proved by pistol or musket shot. This mention of proof reminds us of the fact that armour always *was* proved against the weapons of the period, and it was only because the efficacy of these weapons increased,



Fig. 6. Bascinet, early fifteenth century.
Wallace Collection.



Fig. 7. Sallade, fifteenth century.
Tower of London.



Fig. 8. Armet, early sixteenth century.
Tower of London.

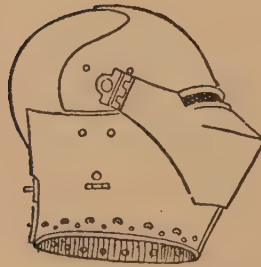


Fig. 9. Close Helmet, early sixteenth century.
Tower of London.

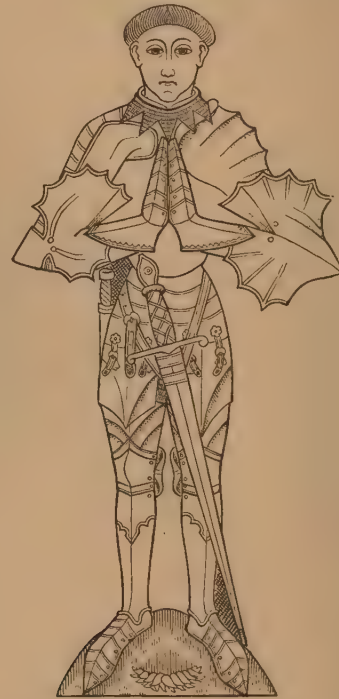


Fig. 10. Thos. Quatremayns, circa 1460.
Thame, Oxon.

and the proof against them was always made by increasing the thickness of the metal, that defensive armour was gradually discarded as quite unbearable and insupportable. With the fifteenth century we find an attempt to increase that essential 'glancing surface' in the armours made by members of the Missaglia family, a notable example of this being the effigy of Richard Beauchamp, earl of Warwick, which shows shallow flutings. These, like the

modern corrugated iron, increase the rigidity without adding to the weight of the metal and at the same time present a channel which guides the weapon-point away from the vital parts of the wearer (fig. 22). This was developed to the full in the so-called 'Maximilian' armour of the early sixteenth century

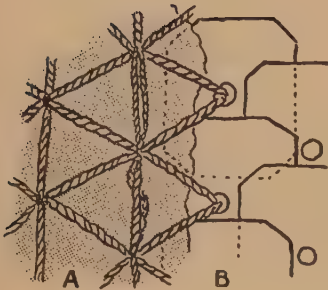


Fig. 11. Detail of Jack. A. Outside;
B. Inside.



Fig. 12. Jack. Chasse of St. Ursula, fifteenth
century. Bruges.

(figs. 20, 23). For lighter equipment the Jack (figs. 11, 12) and the brigandine were largely employed, both being constructed of small plates of metal either sewn between layers of canvas in the case of the Jack or riveted between layers of canvas and velvet in the case of the brigandine (fig. 13). Both were useful against lighter weapons, but of course neither could withstand the attack of the mounted spearmen or of the heavily armed men with battle-axe or mace.

Splinted armour, composed of horizontal lames of plate, constructed with sliding rivets, has also a protective value, and is not so cumbersome as the rigid suit (fig. 14).

The horse armour of the earlier periods consisted of mail or of long padded trappers or housings, and from the very nature of these defences, reaching almost to the hocks and falling in heavy folds, they were obviously of protective value (figs. 2, 3). From the late fifteenth century onwards the horse is armed like his rider in a full suit of plate, but as this does not reach below the body the charger is open to attack in his vital parts, and it would be obviously easy for the foot soldier to place him and his rider out of action by attack on his legs (fig. 20). There appears to have been some attempt to get over this difficulty by arming the horse's legs with articulated defences, but it does not seem to have progressed beyond one experiment made by Harnisch-Meister Albrecht, who produced a complete cap-à-pie defence for the horse (fig. 19).

20 SOME ASPECTS OF THE CRAFT OF THE ARMOURER

The weapons of all sorts were fairly practical, except perhaps the sword, which, in spite of its universal use in warfare from the earliest times, never seems to have been designed as a practical weapon until recent years. The spear and partizan for thrusting are excellent, and weapons such as the Bill,

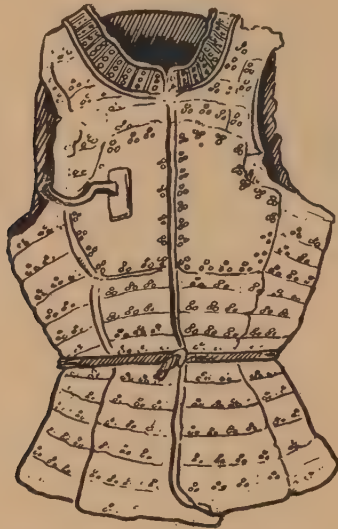


Fig. 13. Brigandine. Vienna.



Fig. 14. St. George of Prague, 1375.

the Pole-axe, and the Mace are all fairly effective. Perhaps the best of all offensive weapons is the long-bow for distance fighting. It is cheap to produce, light to carry, easily brought into action, and can be discharged with great rapidity. The arrows of the English bowmen had not only great penetrative force but produced noticeable moral effect, especially when discharged against cavalry in close formation.

We now come to the second rule, *Convenience in Use*. One of the puzzling problems in the history of military equipment from the earliest periods up to the middle of the nineteenth century is the extraordinarily inconvenient armour and uniform which must obviously have been designed by practical soldiers. I propose to consider only armour and weapons in this paper, but it is not without interest to note the plumed helmets, gigantic bearskins, tight leather stocks, belts, sashes, and other impedimenta with which the War Departments of all countries and all ages have hampered the fighting man.

The sword itself as a convenient weapon would merit a whole chapter in order to particularize the various forms which have been adopted with no consideration for the purpose for which they are intended, and it is only at the beginning of the twentieth century that we have the British cavalry sword

which shows that here at any rate, after over a thousand years of experiment, a practical fighting weapon has been designed.

Under the heading of *Convenience in Use* we find that many of the devices of the armourer are quite inexplicable, for, although they may be defensive to a certain point, they hamper the wearer so seriously that they are more dangerous than safe. The chief of these is the so-called chain mail which persisted from the twelfth to the fifteenth century. It will be easily understood that such a fabric could only be worn over thickly padded under-garments, for the force of a blow would tend to drive the metal into the wearer's body, but there is no glancing surface whatever to deflect the weapon (fig. 2). The whole weight of the hauberk was borne on the shoulders, and in the thirteenth century at any rate the sleeves were continued to the wrists and ended in mitten gloves, the head being protected by a coif, also of mail. I have made practical experiments with a shirt of mail weighing about 29 lb. worn over a thick fisherman's jersey, and I found that the weight of mail from the armpit down to the skirt dragged so much that it was wellnigh impossible to raise the arm to its fullest extent. I found also that in bending the arm to deliver a stroke with axe, mace, or sword the mail collected in such thick folds in the bight of the arm that but little movement was possible in this direction. Further, I found that, with what was a light under-garment compared to the thick gambeson which must have been worn on active service, it was a matter of the very greatest difficulty to put on or put off the hauberk with ease or rapidity. It is almost incredible, therefore, that the Crusaders should have worn this defensive armour with a long surcoat over it through their arduous campaigns under an eastern sun, for when on the march and in expectation of hourly attack the mail hauberk must have been worn night and day. This inconvenience must have been still further increased in the fourteenth century, for, if we take the monumental brasses as a guide, we find on such examples as the Creke and D'Abernon brasses that the knight wears a gambeson, a hauberk, what appears to be a quilted or pourpointed garment, and a surcoat over all.

I have noticed before the small additions of plate which appear on these and other brasses attached by laces and straps, which must have added still further to their inconvenience (fig. 4).

Another unpractical device is the mail nasal, which from its frequency on sculptured monuments, particularly in Germany, must have been a favoured device. Here there is a flap of mail, sometimes with a small plate nasal attached to the upper edge of the camail, and when in use it was brought upwards over the nose and held by a turning-pin under the helmet (fig. 15). This can only have been protective to a very small degree and must have caused a certain amount of inconvenience in rapid movement of the head.

22 SOME ASPECTS OF THE CRAFT OF THE ARMOURER

In the period of full plate armour there are two or three details which require some explanation. First, in the Golden Age of the fifteenth century we find the same attachment of additional pieces by laces that I have noticed



Fig. 15. Gunther von Schwartzburg, 1349. Frankfort-am-Main.

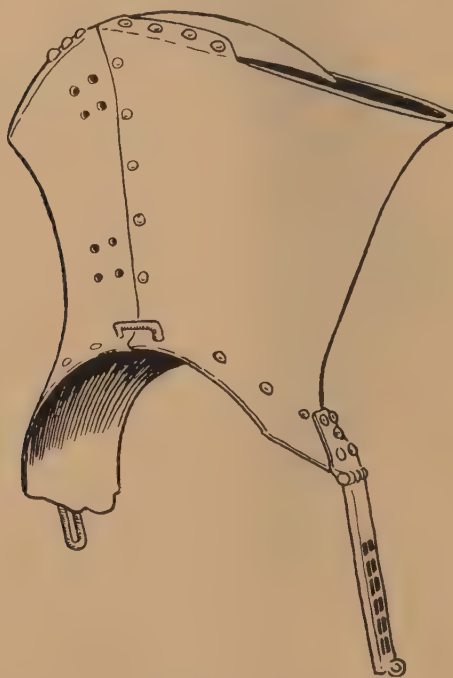


Fig. 16. The 'Brocas' Helm, fifteenth to sixteenth century. Tower of London.

in the fourteenth-century brasses. The magnificent suit of Sigismund of Tirol exemplifies this to the fullest extent, for both elbow cops and pallets are so attached (fig. 24). The long solleret, following the fashion in civilian wear, is no improvement whatever on the smaller foot-covering, for it is absolutely impossible for a man to walk with long metal toe-pieces, often put on after the

rider is mounted, and sometimes reaching to the extravagant length of 14 or 15 in. Under this heading also should be noticed the neglect of constructional methods in the late sixteenth and seventeenth centuries. The normal solleret when properly made gives considerable ease to the foot in walking,



Fig. 17. Pauldrons. A. Statue of Colleoni, Venice. B. Missaglia armour, Vienna.

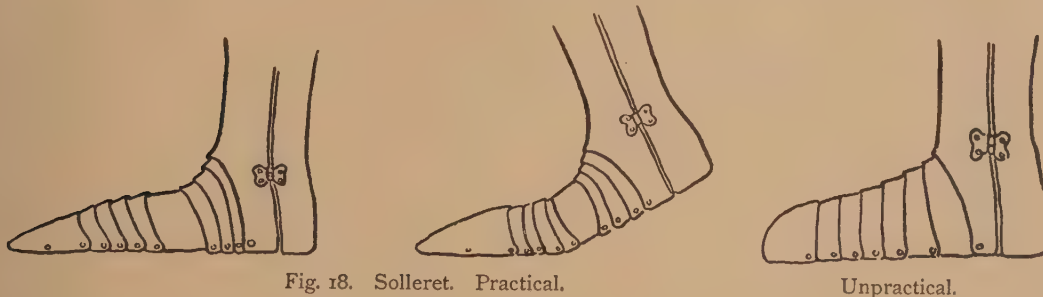


Fig. 18. Solleret. Practical.

Unpractical.

for the upper plates overlap downwards, then comes a broad tread and the lower plates overlap upwards. But in the period of decadence in some examples the plates overlap downwards with no tread, and therefore it is practically impossible to bend the foot (fig. 18).

In addition to the extravagant sollerets we have the great elbow cops shown on the Quatremayns brass at Thame (fig. 10), and the pauldrons on the figure of St. George by Pisanello in the National Gallery, whereon we find the great overlapping pauldrons which appear in a lighter form on the statue of Colleoni and on the armour of Sanseverino by Missaglia (fig. 17). The large elbow cops must have prevented any quick movement of the arm, and the fact that the pauldrons overlap at the back must have made it impossible to deliver a swinging cut without locking the pauldrons.

Plate armour at its best was certainly made to measure and therefore all the articulated joints coincided with those of the wearer. I have made personal experiments with this and have found that with the properly fitting suit, weigh-

ing anything up to 50 lb., there is little inconvenience. A still more practical defence was the suit of 'splints', which was composed of smaller lames and gave the wearer much greater ease of movement. This is particularly noticeable in the magnificent statue of St. George at Prague, which shows that as early as the fourteenth century the armourer had evolved great improvements in his defensive productions (fig. 14). Perhaps the most perfect example of armour which follows closely all the craft rules is the suit made for Henry VIII for fighting in the lists (fig. 25). The wearer is completely covered back and front with articulated plates moving with the greatest ease. All the different pieces are joined together so ingeniously that there is no possibility of a weapon penetrating, and it is only the extreme weight (90 lb.) which makes it unwieldy for rapid movement. That the full suit of plate was often inconvenient we judge from records of all periods from the earliest times. Froissart, describing the battle of Poitiers, states that the mounted man was at a great disadvantage when dismounted owing to the weight of his armour. In 1383 Sir Hugh Calverly at the battle of Mount Auray ordered his men to take off their leg armour in order to move more easily. In 1590 Sir John Smith alludes frequently to the soldier's dislike of too many 'peces of yron', and he notes that pauldrons, vambraces, and other pieces are frequently discarded. This is borne out by Edmund Davis, writing in 1619, who states that after an arquebusier has marched for 12 miles in a heavy shirt of mail and a burgonet he is more apt to rest than ready to fight. All this evidence goes far to show the difficulties of the armourer; for he had to protect his patron and at the same time allow him comparative ease of movement, a combination of conditions under which it is practically impossible to evolve a perfect defence.

The cumbersome shield of the Norman period had by degrees given way to the small 'heater'-shape shield, but in spite of its more convenient size this must have been an additional inconvenience to the mounted man in close combat. With the advent of full plate the shield was discarded and the fighting man relied solely on the defences of his arms and body.

The helmets from the fifteenth century onwards show various types—good, bad, and indifferent. The closely fitting bascinet as a practical defence is not particularly improved when what is known as the 'pig-faced' visor is added. Perhaps the best helmets in point of convenience and adequate defence are the close-fitting sallade and the early armet, the latter protecting the whole head and yet allowing certain freedom of movement, the neck being protected by a chain-mail valance. The long-tailed sallade would appear to have many drawbacks (fig. 7). While protecting the upper part of the face and head it was necessary to have a chin-piece in addition, and this combination of two distinct pieces provided another opening for the opposing weapon. A thick

cap was worn under the sallade, but the helmet itself had to be attached to the head with laces or straps. Its long tail projecting at the back must have offered a very attractive surface to the enemy, for a blow on the tail would most certainly put the wearer out of action. With the sixteenth century we find the armet improved from a defensive point of view, for it has an embossed rim on the gorget, thereby completely protecting the head and neck; but from the fact that the upper rim of the gorget is in a sloping position it is quite impossible to turn the head when the helmet has been locked into place. In fact in some examples there is a locking-pin at the back to prevent any movement of the head. These helmets were for war and not for the tournament, and therefore a man must have been in this strained condition with the head completely locked in one position all through an action (fig. 8). Another type of helmet which needs some explanation is the morion of the late sixteenth and seventeenth centuries. From the number of these that survive at the present day it is clear that every army in Europe must have used these defences in very large numbers. Although the high comb is certainly protective, the upturned peaks at the back and front not only do not protect the eyes and nape of the neck in any way, but, like the tail of the sallade, they offer lodgement to cutting blows. A grave inconvenience to the fighting man is the weight of armour of later periods. This, as I have noticed before, was due to the increased employment of firearms, for each piece was, or should have been, proved by pistol or musket shot, and this could only be achieved by thickening the metal as the firearm increased in efficiency; and, as the writers to whom I have alluded before have stated with unanimity, the weight became so great that eventually the defence had to be given up.

I have alluded to the armour for the horse, of mail, fabric, and plate, as being adequate protection, but under the heading of convenience in use there must have been very serious drawbacks, for the long trapper of mail or fabric must have hampered the horse considerably. The plate defences with their padded lining, apart from the dead weight on the horse, were practical, and but little inconvenience was caused to the horse beyond the obvious liability to attack on the legs, to which I have alluded before (fig. 20).

The sword from the twelfth up to the fifteenth century was just about as inconvenient a weapon as could be devised. Long, broad bladed, and badly balanced, and often poor in temper, it had a small grip with merely a cross guard, and when once a cut had been delivered was quite useless for rapid parry or guard. The fact that it was pointed suggests that it was intended for thrusting, but this was practically an impossibility owing to its weight (fig. 2). It is curious to note that in some of the Temple effigies the sword is found on the right side, and as it occurs more than once this cannot have been merely a

26 SOME ASPECTS OF THE CRAFT OF THE ARMOURER

peculiarity of a left-handed man or artistic licence in the composition of the monument. In some British cavalry regiments at the present day the sword is worn on the off side, but with the modern weapon the withdrawal from the scabbard is comparatively an easy matter. With the fourteenth-century sword,



Fig. 19. Harnisch-Meister Albrecht, 1480. Vienna.



Fig. 20. The Emperor Maximilian I.

however, such an action must have been wellnigh impossible, and one can only imagine that the sword was drawn long before going into action and was thrown away when the need came for using another weapon.

I will now come to the third of our craft laws, that all examples of craftsmanship should be *Respectful of Material*.

Up to the sixteenth century the armourer respected this law to the fullest extent and we find no attempt to imitate any other fabric or material, but as his expert craftsmanship progressed he evidently desired to show his skill in the treatment of metal. This he achieved by fashioning helmets in the form of the human face (fig. 23), sometimes with long moustaches of heavy metal or with wings growing out of the ears. These examples, from the thickness of the metal, must have been intended for practical use, and there is no excuse whatever for departing from the simple forms of the visor, which could not be improved upon. In parade armour, such as the well-known mask helmet of Henry VIII, there is some excuse, except that it is an outrage on steel and iron to model them in grotesque form, even when this is done with the amazing skill which

characterizes this helmet. But there is worse to come, for the armourer also essayed to imitate fabrics, and this must have been by no means uncommon, for most European armouries possess examples of what is known as puffed and slashed armour which faithfully imitates civilian dress even to the reproduction of stitches and seams (fig. 21). This imitation is all the more absurd as the puffed and slashed civilian dress was meant to signify that the wearer was a swashbuckler and had had his garments cut in street brawl or duel.

My last craft axiom is *That all Decoration should be Subservient to the Foregoing Rules.*

With the exception of the grotesque helmets and puffed and slashed armour alluded to above, the armourer carried on the finest traditions up to the middle of the sixteenth century. Any decoration which he was called upon to provide always took the form of etching or engraving which in no way destroyed the utility of the defence, as witness the magnificent armour made for Henry VIII by Conrad Seusenhofer; and this restraint in craftsmanship was practised by our great English armourers Jacob Halder and William Pickering up to the end of the century, for their splendid 'Greenwich' suits are decorated with fine engraving or with shallow recessed work, which in no way destroys the glancing surface of the metal (fig. 26). In Germany, France, and Italy, however, the armourer ran riot. Whether we are indebted for this splendid incoherence to the arch-sinner Benvenuto Cellini, or whether he himself was carried away by the wave of elaborate ornamentation which overswept Europe, is not for me to say, but the same love of display without any reference to the object decorated is to be noticed in all works of craftsmanship of the late sixteenth and early seventeenth century. The Louvre School in France, and the masters Pefenhauser and Knopf in Germany and Picinino in Italy, evidently considered that their function was not to provide defensive equipment for their patrons but to cover every inch of metal with amazing examples of their skill as metal workers pure and simple (fig. 28). To paraphrase a well-known but apocryphal saying: 'C'est magnifique, mais ce n'est pas le fer.' It may be urged by champions of these craftsmen that the armour was purely for parade purposes; but even here there were serious disadvantages, for separate lames or plates were embossed in such a way that



Fig. 21. Three-quarter suit 'slashed armour'.

they would not slide easily one over the other, and the surface of each plate was bound to be scored and rubbed at the slightest movement.

It would be possible and certainly interesting to continue these investigations still farther and still more minutely, but the foregoing notes do, I think, put forward certain problems of which no practical explanation seems to be forthcoming. The only suggestion I can make is that the military artist, military painter, or sculptor of all ages has represented the fighting man, either on a memorial effigy or in illuminated manuscripts, as he ought to have been equipped according to the fashion of the period. We find every battle-piece showing the combatants in full cumbrous equipment, with swords cutting easily through helmets which must have been of extremely tough material. We find horses charging at full gallop encumbered by yards of decorated trappers. When we come to later years we find Napoleon's troops in the paintings at Versailles in full review order, and, to take a later example, in Philipoteau's painting of the battle of Fontenoy both the English and French appear to be in brand-new uniforms, and that after a long and strenuous campaign. Up to recent years our leading soldiers and sailors are painted in full dress uniform, blazing with decorations and gilded sword-hilts, and encumbered with that extraordinary appendage known as the sabretache.

If it were not for the modern war artist and photographer it is possible that future students of military matters would be led to suppose that our generals and admirals went into action equipped as they are painted, in full dress, just as we have been led to believe that the fighting man from the fourteenth to the sixteenth century always wore complete armour. I would venture to suggest that possibly the complete panoply was worn on occasion just as modern British uniform is worn for parade and ceremonial, but when it came to long exhausting campaigns in all weathers the soldier discarded the unessential part of his equipment and retained only those portions which he could wear with comfort and convenience, just as in the war of 1914-18 we find from actual photographs taken in the war areas that the fighting forces, in their fur coats, trench waders, woollen headgear, and gloves, could hardly be recognized as the spick-and-span guardsmen of Wellington Barracks or Aldershot.

Thanks are due to the following for permission to reproduce illustrations: Mr. J. Pierpont Morgan for fig. 2 from his *Old Testament Illustrations*, published by the Roxburghe Club; Mr. Mill Stephenson, F.S.A., for fig. 4; Messrs. T. C. and E. C. Jack for figs. 6, 7, 8, 9, 20, and 21 from Ashdown's *British and Foreign Arms and Armour*; Messrs. Methuen for figs. 11, 12, 13, 14, 16, 17, 18, 19, 22, and 24 from ffoulkes's *The Armourer and his Craft*, and to H.M. Stationery Office for figs. 25-8 from *The Armories of H.M. Tower of London*.

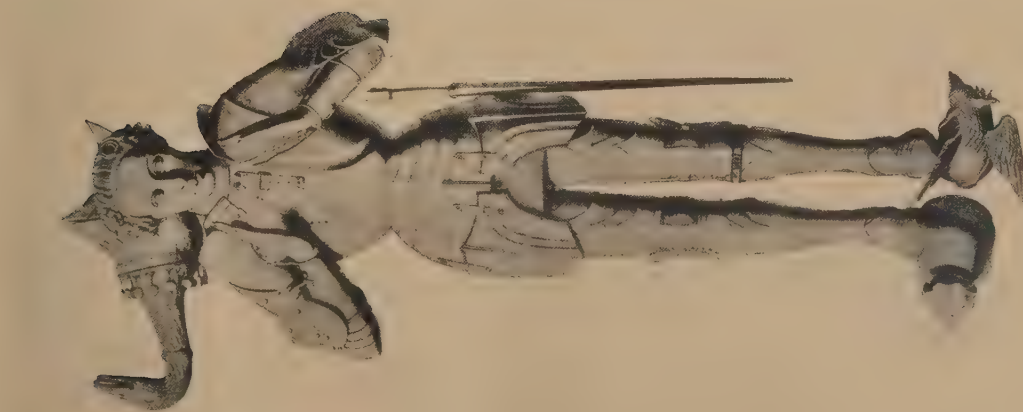


Fig. 22. Richard Beauchamp, Earl of Warwick,
c. 1454, St. Mary's, Warwick

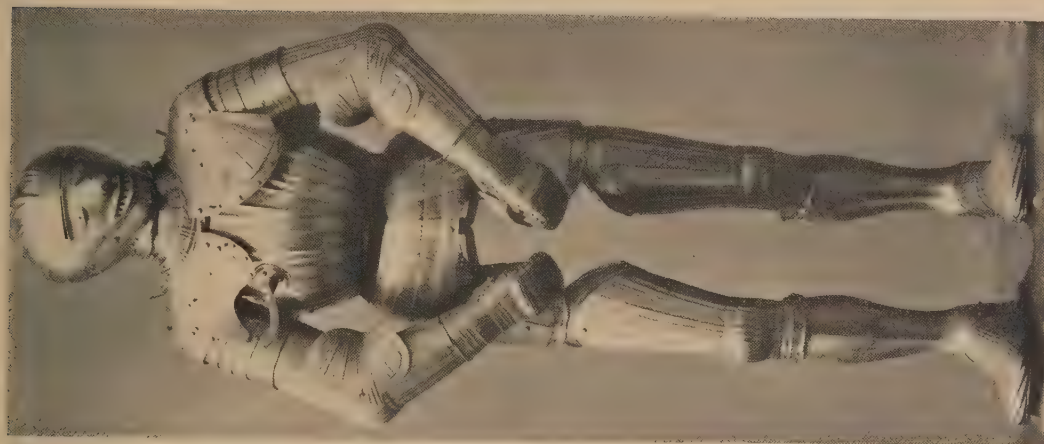


Fig. 23. 'Maximilian' armour, c. 1530
Nürnberg



Fig. 24. Sigismund of Tirol, 1427-96,
Vienna

Published by the Society of Antiquaries of London, 1929

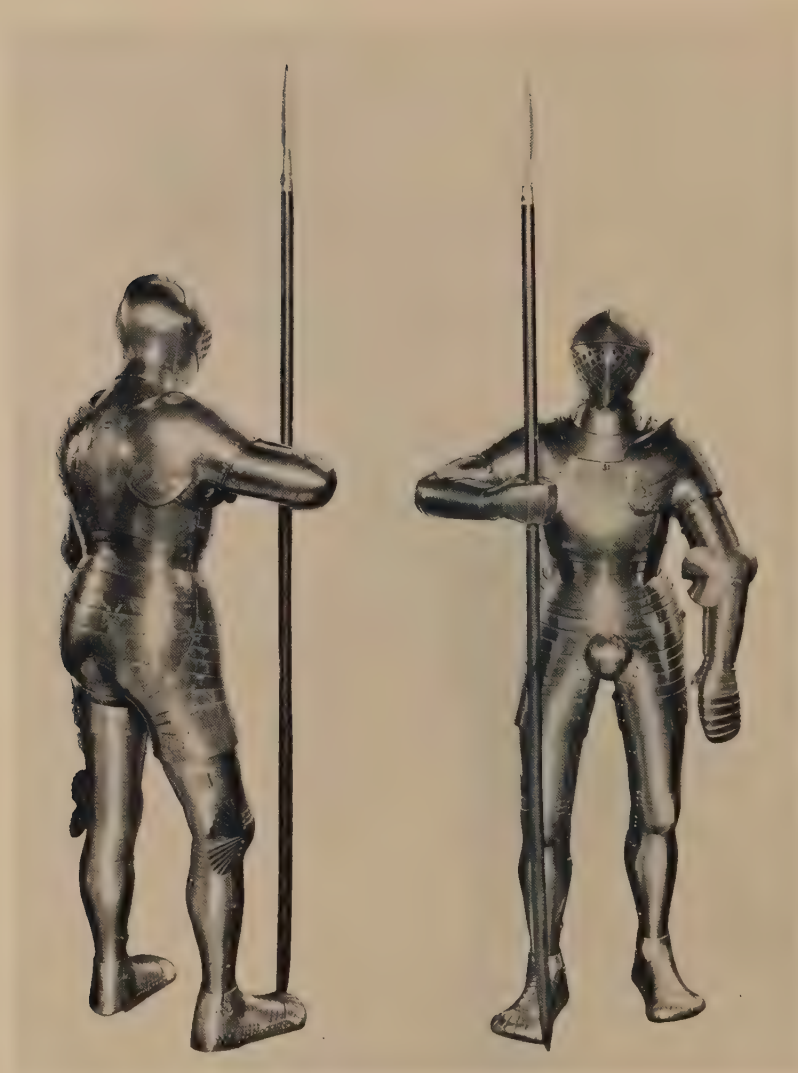


Fig. 25. Jousting Armour of Henry VIII
Tower of London



Fig. 27. North Italian armour, late sixteenth century
Tower of London

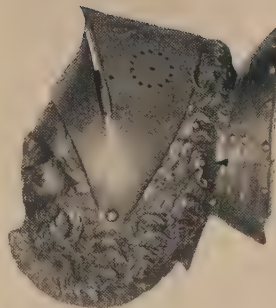


Fig. 28. Helmet of Prince Charles
c. 1611. Tower of London



Fig. 26. Armour of Robert Dudley, earl of Leicester
Greenwich School, late sixteenth century
Tower of London

Published by the Society of Antiquaries of London, 1929

III.—*The Iconography of St. Thomas of Canterbury.* By
TANCRED BORENIUS, *Esq., Ph.D., D.Lit.*

Read 28th February 1929

The materials for a study of the iconography of St. Thomas Becket still exist in great abundance. On the canonization of the saint in 1173, his cult evidently spread all over Europe with lightning speed, and the consequences of this were very soon to be seen in all the arts. Much of the artistic production of different countries and centuries relating to the personality and life of St. Thomas has, of course, perished: and in England, after the de-canonization of 'Bishop Becket', decreed by Henry VIII, a veritable war was, in 1538, declared on the innumerable representations of the saint then existing in this country, the proclamation enacting expressly that 'his images and pictures throughout the whole realm shall be put down and avoided out of all churches and chapels and other places'. Where the destruction was not complete, defacement of varying extent was resorted to, as is clear, for instance, from the many illuminations of manuscripts in which the rendering of St. Thomas Becket has been disfigured or partly obliterated. But even so, as already mentioned, there still exists plenty of documentation on which to base a study of the iconography of St. Thomas Becket; and I have now for some time been gathering material with that end in view. In doing so my endeavour has been to work as systematically as possible, though, as all students of iconography can aver, chance often gives valuable help in the pursuit of our quest. I had an experience of the working of chance only recently when a visit to Salamanca, entirely unconnected with my interest in St. Thomas Becket, suddenly brought me up against an extremely interesting Romanesque church of San Tomás Cantuariense, from which, however, all traces of the representation of the saint had vanished, except a very commonplace figure of a mitred bishop in carved and painted wood of quite recent date. Even though I have kept photographers busy over a wider area of Europe than I could anticipate when first embarking on this task, I dare not hope that I have as yet surveyed my material with anything approaching completeness; but the data I have brought together are, nevertheless, perhaps sufficient to allow certain deductions to be made and certain lines of evolution to be laid down.¹

¹ Of previous attempts at surveying the iconographical material relating to St. Thomas Becket, perhaps the most complete is that contained in *Notes and Queries*, 10 ser., 1, June 4, 1904, pp. 450-2, being a symposium in response to an inquiry by Mr. H. Snowden Ward.

By way of introduction, the question whether there exist any representations of St. Thomas Becket dating from his lifetime must first be considered. The only category of examples that deserves serious attention in this connexion is that formed by such seals as are either definitely known to have been used by the archbishop himself or else are reputed to have been so used. Their number is not large—four in all; and the one which is undeniably authentic is unfortunately quite irrelevant to our inquiry, as the figured portion of it is simply a classical intaglio of the god Mercury. The three others all contain a conventional figure of an archbishop, in pontificals, with mitre and crozier, imparting the benediction. One of these seals must, however, undoubtedly be regarded as a forgery; and another is probably nothing but the seal of St. Thomas's predecessor Theobald, with the inscription slightly re-cut so as to fit its new owner. Of both the seals casts exist in the collection of the Society of Antiquaries. Of a third, only a woodcut is known, published in the *Gentleman's Magazine* for 1848: from this, no definite inference can be drawn as to the authenticity or otherwise of the seal.¹

The very earliest posthumous representation of St. Thomas Becket known to us is a single figure: it is the one which occurs among the Byzantine mosaics of the cathedral at Monreale in Sicily (pl. ix, fig. 1), and as the whole building, mosaics and all, is understood to have been completed in an almost inexplicably brief period, between 1174 and 1182, this mosaic would at most be separated by twelve years from the date of the martyrdom. As to the reason which prompted the inclusion of this recently canonized saint among those represented in these mosaics who were of so much more ancient standing in the Catalogue of Saints, it is really not far to seek: for the builder of Monreale Cathedral, William the Good of Sicily, was in 1177 married to Princess Joan, daughter of Henry II of England. Whether, all circumstances considered, it could be regarded as 'a compliment to his English bride', as it has been called, is another matter. The rendering of St. Thomas is a very simple one: he is shown in his archiepiscopal robes, without any indication of a mitre, holding a book in his left hand and imparting the benediction with his right. Of any emblem of his martyrdom there is no trace.

Of renderings of St. Thomas of this type, showing him just as the archbishop, there exists quite a number, covering a long stretch of time: it is, of

¹ Cf. *The Gentleman's Magazine*, Nov. 1848, vol. xxx, N.S., p. 494 (the reproduction accessibly repeated in J. R. Green, *A Short History of the English People*, illustrated edition, London, 1892, vol. i, p. 201); and Albert Way in *Archaeological Journal*, vol. xxvi (1869), pp. 84-9, where even the antiquity of the seal with the altered inscription is perhaps somewhat needlessly questioned.



Fig. 1. Mosaic, Monreale
Late twelfth century



Fig. 2. Fresco, Sacro Speco, Subiaco
c. 1260



Fig. 3. High Relief, Sens
Cathedral. Late twelfth
century



Fig. 4. Statue on the front of
Wells Cathedral. Thirteenth
century



Fig. 5. Statue in carved wood,
Historical Museum, Stockholm
North German. c. 1475

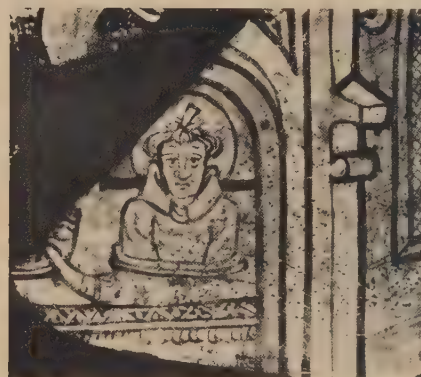


Fig. 6. Stained glass fragment,
Fairford
Fourteenth century

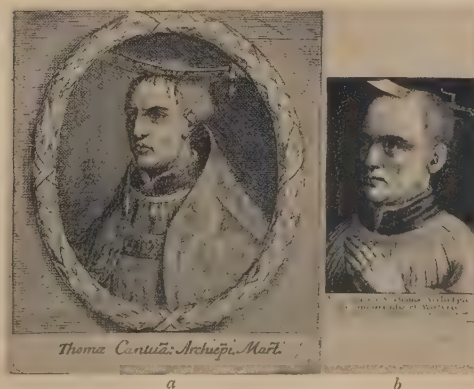


Fig. 7. (a) Anonymous etching, seventeenth
century; (b) Etching by W. Hollar



Fig. 1. Picture by Timoteo Viti, Duomo at Urbino. 1504

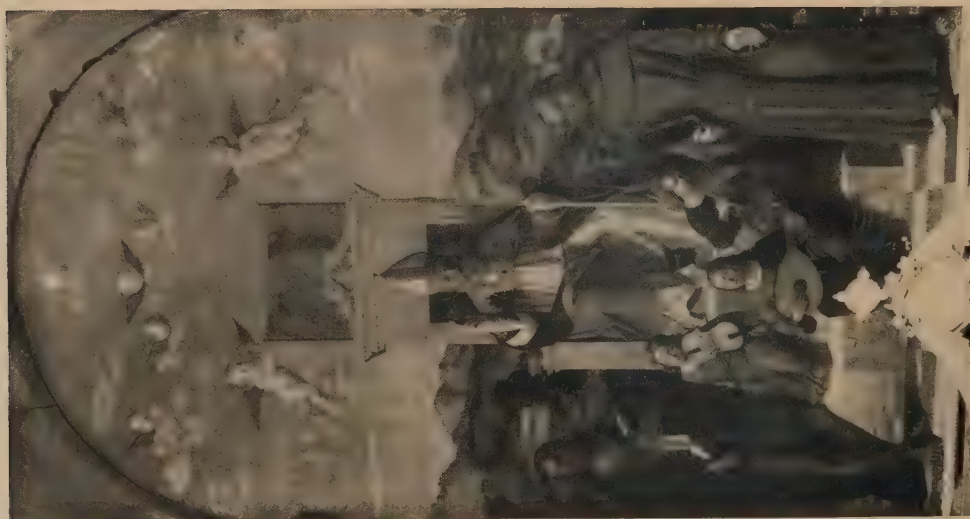


Fig. 2. Picture by Girolamo da Santa Croce
San Silvestro, Venice. 1520



Fig. 3. Picture by Felice Brusaporzi, San Tommaso
Cantuariense, Verona. 1579

course, iconographically much the least interesting category, though many of the examples which it comprises are far from unimportant artistically. Among wall-paintings a notable early instance is seen in a fresco of about 1260, in the *Sacro Speco* at Subiaco (pl. ix, fig. 2), in which St. Thomas, decidedly youthful in appearance, is depicted seated between St. Stephen and St. Nicholas. Still keeping to Italy, but advancing far across the centuries, we note the presence of St. Thomas, as a youthful archbishop holding a long cross with rock-crystal shaft, in a picture of 1504, by Timoteo Viti, in the sacristy of the *Duomo* at Urbino (pl. x, fig. 1); and in 1520 we find him enthroned as the principal figure of a picture of very Bellinesque character by Girolamo da Santa Croce in the church of San Silvestro at Venice (pl. x, fig. 2). It is interesting to note in this connexion that at Venice St. Thomas Becket was venerated as the patron of the wine coopers;¹ just as in London he was the patron saint of the Company of Brewers.² One wonders what the reason for this can have been: all I can say on this point is that there are quite a number of facts in the life of Becket which associate him somewhat pointedly, at any rate, with the partaking of wine. Such is the circumstance reported by William FitzStephen, that although his general drink was water in which hay had been boiled, he always would insist on taking the first taste of the wine and then gave it to those who were at the table with him. Also, there is the story that before he went to meet his fate he had drunk more wine than usual, and when this was pointed out to him he replied, 'He who must lose much blood, must needs drink much wine'. And one or two further incidents pointing in the same direction might be quoted.

Of English medieval wall-paintings of St. Thomas as the archbishop, that in Hauxton church, Cambridgeshire, dating from the thirteenth century, may be singled out for special mention both on account of its high artistic quality and because of its excellent state of preservation. Originally no doubt also a fine work, but now unfortunately very much faded, is the large figure of St. Thomas on the southern face of one of the four western Norman piers in St. Albans Cathedral, dating from the late fourteenth century.

Turning now to representations other than paintings of St. Thomas as merely the archbishop, we may at first single out for mention one or two pieces

¹ See G. Ludwig, in *Jahrbuch der königlich preussischen Kunstsammlungen*, vol. xxiv, 1903, supplement, p. 18.

² I am indebted to Mr. A. W. Clapham, F.S.A., for pointing this out to me. In this connexion it may be noted that the Worshipful Company of Brewers possesses an embroidered pall of the early sixteenth century, containing as part of its scheme of decoration two half-length figures of St. Thomas Becket.

of sculpture of more than average interest. One is the fine late twelfth-century statue, or rather high relief, which has been let into the wall of the ambulatory of Sens Cathedral, and which comes from the house inhabited by St. Thomas during his stay at Sens (pl. ix, fig. 3); and the other, a very striking presentment, in carved wood, of the enthroned archbishop, formerly in the church of Skepptuna in the province of Uppland, Sweden, and now in the Historical Museum at Stockholm (pl. ix, fig. 5). The inscription on the halo discloses the identity of the saint, and the whole is a fine example of late Gothic realism, of about 1475, not improbably by the same artist, Bernt Notke of Lubeck, as the celebrated group of St. George and the Dragon in the Storkyrka in Stockholm.¹

St. Thomas as just the archbishop, without any further emblems, also occurs with great frequency among the Canterbury pilgrims' signs (see figs. 1-9), so plentifully represented in the British Museum, the London Museum, the Guildhall Museum, and the Royal Museum at Canterbury.² A favourite mode of presentment is that of his mitred bust: another is that of the saint on horseback—a motive which probably is not only connected with the fact that the Saint was a great traveller, but also reflects his fame as a horseman—there are the accounts of how he fought in Henry II's campaign in Southern France and Normandy in 1159, unhorsing, as Guernes of Pont St. Maxence saw him doing, many a French knight; and Herbert of Bosham tells us how, after his elevation to the archbishopric, St. Thomas continued to take frequent exercise riding, as he saw no ascetic reason for giving up that practice.

On monumental brasses, figures of St. Thomas as the archbishop are of repeated, if not of very abundant occurrence, the most notable examples being

¹ Mr. Eric Maclagan has kindly drawn my attention to the fact that on the keystone of one of the arches of the south doorway of the church of Barfreston, Kent (reproduced in E. S. Prior and A. Gardner, *An Account of Medieval Figure Sculpture in England*, Cambridge, 1912, fig. 175), there occurs a half-length figure of a bishop which has often been interpreted as representing St. Thomas Becket. As the doorway has been dated as early as about 1170, this identification, if correct, would of course be extremely interesting; but certainty on this point is scarcely attainable.

² Compare on these pilgrims' signs e.g. C. Roach Smith in *Collectanea Antiqua*, vol. i (1848), pp. 81-91, vol. ii (1852), pp. 43-50; T. Hugo in *Archaeologia*, vol. xxxviii (1860), pp. 128-34; H. Syer Cuming in *Journal of the British Archaeological Association*, vol. xxi (1865), pp. 192-6, xxiv (1868), pp. 219-30. The selection of examples illustrating the present paper has been drawn by Mr. H. C. Whaite, those in the Guildhall Museum being reproduced by kind permission of the Museum authorities. Of individual examples in other collections we may here notice an exceptionally finely modelled bust of St. Thomas between two angels swinging censers, found in the Steelyard, Thames Street, and now in the University Museum of Archaeology and Ethnography in Cambridge, and an ampulla in the York Museum (reproduced by C. Roach Smith, *op. cit.*, vol. ii, pl. xviii).



MEDIEVAL PILGRIMS' SIGNS AND BADGES, IN PEWTER OR LEAD

Figs. 1, 2. Reliquaries in form of a shrine, found in the City of London, Steelyard. Guildhall Museum.

Fig. 3. Found in the City of London, Dowgate. Guildhall Museum.

Fig. 4. Cast of Stone Mould. British Museum.

Fig. 5. British Museum.

Fig. 6. British Museum.

Figs. 7-9. Ampullae, British Museum (fig. 9 somewhat reconstructed).

perhaps those on the Nelond brass, at Cowfold, Sussex (1453),¹ and at Edenham, Lincs. (c. 1500).² In stained glass, such figures are, on the other hand, far from rare.³

Next in order of our inquiry come those single figures of St. Thomas in which he is shown with an emblem of his martyrdom. From the circumstances of his death, it is obvious that the sword should be the most natural emblem in that connexion. One type—perhaps what might be called the standard type of the martyred St. Thomas—is the one which shows him with his skull cleft by a sword, the latter still adhering to the wound it has inflicted. Reproductions are here given of two etchings which bring before us late, but typical, examples of this category (pl. ix, fig. 7); that on the right being by W. Hollar, and according to its inscription, reproducing a picture in the Arundel collection, attributed to no less a master than Jan van Eyck. The attribution strikes one as far from impossible; but even if the picture were by some less famous master of the early Netherlandish school, it would be of extreme interest to be able to trace it. We may also note that one of the fragmentary panels of fourteenth-century stained glass in Window no. XIV in Fairford church shows, placed on an altar, a *reliquaire-chef* of St. Thomas with the end of the assassin's sword piercing his head (pl. ix, fig. 6). Only one example, associable with England, of this type of the *reliquaire-chef*, so well known to us, for instance, from the work of the Limoges enamellers, has survived to our day, namely, the fifteenth-century male bust (possibly of Christ), in latten or brass, with traces of silver plating, found near the London Docks at Wapping, and now in the Guildhall Museum.⁴ The principal instance of the type, so far as St. Thomas Becket was concerned, was, of course, the one which for many centuries received the veneration of the pilgrim in the Corona in Canterbury Cathedral, and the aspect of which is perhaps reflected in some of the Canterbury pilgrims' signs. To the representation of the type, showing St. Thomas with the sword remaining in his head, there exists an analogy, popularized by many well-known Italian pictures: the rendering of St. Peter Martyr, the Dominican, who was murdered on the road between Como and Milan on 28th April 1252, and canonized the next year. In his case the weapon is usually a knife or an axe, not a sword.

¹ Reproduced in Herbert W. Macklin, *The Brasses of England*, 1913, p. 135.

² Compare Mill Stephenson, *A List of Monumental Brasses in the British Isles*, 1926, p. 284 and *passim*, noting additional examples in Hereford Cathedral, at Knebworth (doubtful), and Tattershall (two).

³ For full statistics see Philip Nelson, *Ancient Painted Glass in England*, 1913.

⁴ Reproduced in *Catalogue of the Collection of London Antiquities in the Guildhall Museum*, London, 1908, pl. LXXXVII, no. 13.

Other subsidiary types have to be noted. One is that of the saint with a dagger plunged into his heart—as he appears in the picture of the Virgin and Child with angels and saints, painted by Felice Brusasorzi (1542–1605) in 1579 for the high altar of the church dedicated to St. Thomas Becket in Verona; then there is the type of St. Thomas holding in one hand the archiepiscopal cross, and in the other an inverted sword (see a wall-painting in Stoke Charity church, Hampshire).¹ Yet another type associated with the sword as an emblem is that in which it is either placed on the ground close to the saint, or held by an attendant angel. An instance of the former variant is seen in a picture in the church of San Salvatore at Bologna—a city in which it will be remembered that St. Thomas studied, and in which the kneeling figure of the saint is, somewhat incongruously, introduced into the foreground of a Presentation of the Virgin in the Temple (pl. xi, fig. 1): the picture is by Girolamo da Treviso, the artist who eventually entered the service of Henry VIII and was killed by a cannon ball at the siege of Boulogne in 1544. The other variant is seen in the figure kneeling in the foreground on the left, in the picture of the Adoration of the Trinity, by Durante Alberti (1548–1613) in the church of the Venerable English College at Rome (pl. xi, fig. 2). Readers of the delightfully vivid first chapter of Cardinal Wiseman's *Recollections of the Last Four Popes* will remember the reference to this 'noble altarpiece' as he calls it—it was that reference which put me on the track of this work—and it is also notable through including a rendering of another English saint, who is much more seldom met with in continental pictures than St. Thomas—namely St. Edmund, king and martyr, killed by the Danes by being shot with arrows—hence the sheaf of arrows held by the angel behind him, while the sceptre on the ground in front of him indicates his kingly rank.

A very interesting variant of the type of the martyred St. Thomas is the one which shows him holding in his hand the severed crown of his head. This variant can be exemplified at least twice in England—among the statues on the front of Wells Cathedral² (pl. ix, fig. 4); and in the stained glass of the north rose window at Lincoln. In continental iconography, the renderings of St. Denis and St. Nicaise and some other martyred bishops are somewhat analogous to this variant; only, of course, they hold their entire heads in their hands, not the crowns only. Yet another variant of the type of the martyred St. Thomas Becket is seen in a wall-painting which formerly adorned the church of Stoke d'Abernon, Surrey (fig. 10). Here the saint was in his archiepiscopal robes,

¹ Reproduced in the *Journal of the British Archaeological Association*, vol. x (1855), pl. 6, facing p. 74.

² Compare St. John Hope in *Archaeologia*, vol. lix (1904), p. 156, pl. xxvii; and W. R. Lethaby, *ibid.*, p. 170 sq.

with cross staff, and on the right, below, one of his murderers was depicted in an attitude of supplication.¹

From these non-narrative representations of the figure of St. Thomas we may now turn to the large and important category of renderings of events from his life. Perhaps the fullest series of these now extant is the one to be found in that noble work of English illumination of the early fourteenth century, Queen Mary's Psalter, in the British Museum. No fewer than twenty-two scenes are here represented, the story beginning with the charming and, of course, entirely fanciful story of how the mother of the saint, Mathilde, a Saracen princess, followed Gilbert Becket, the father of St. Thomas, to England, knowing only the words 'Gilbert' and 'London'.² Even more interesting must have been the series of earlier illuminations of about 1230-50 (possibly of the school of Matthew Paris), illustrating a life of St. Thomas in French verse, of which unfortunately only four pages have survived (pl. xii, figs. 1-8): they were in 1883 in the possession of Madame Goethals-Danneel of Courtrai, and in 1885 were published by Monsieur Paul Meyer for the *Société des anciens textes français*.³ Elaborate picture chronicles in stained glass

¹ Through the kindness of Mr. P. M. Johnston, F.S.A., I am enabled to reproduce this very interesting painting from a pen and ink drawing made about 1866 by an amateur artist, Miss MacGregor. There exists an erroneous statement (repeated in Keyser's *List of Buildings having Mural Decorations*, 1883, p. 239) that the church of Stoke d'Abernon contains a painting of the Murder of Becket. This is the painting alluded to. As a curiosity we may here note the representation of St. Thomas as a Bishop with a Lion in a French Book of Hours, 1490-1500, in the Fitzwilliam Museum at Cambridge (see M. R. James, *A Descriptive Catalogue of the Manuscripts in the Fitzwilliam Museum*, 1895, 119-53).

² All the illuminations of this MS. have been published by Sir George Warner (*Queen Mary's Psalter*, London, 1912); the scenes from the life of St. Thomas Becket, which occur on fols. 288v-98v of the manuscript, are given on pls. 282-94 of the volume of reproductions (cf. also pp. 50 sqq. of the letterpress). The series of incidents is as follows: (1) the Saracen princess arrives in London, jeered at by the crowd and recognized by Richard, the servant of Gilbert Becket; (2) baptism of the princess; (3) marriage of the princess and Gilbert Becket; (4) birth of St. Thomas Becket; (5) Henry II hands St. Thomas his letters of appointment as archbishop; (6) St. Thomas consecrated archbishop; (7) St. Thomas and Henry II disputing (the council at Northampton); (8) St. Thomas crossing the Channel; (9) Henry II pronounces sentence of exile on St. Thomas's relations; (10) St. Thomas's kindred crossing the Channel; (11) St. Thomas's kindred travelling on foot; (12) St. Thomas welcoming his kindred; (13) St. Thomas handing to Pope Alexander III his ring and cross; (14) St. Thomas at table with the pope; (15) St. Thomas welcomed by the abbot of Pontigny; (16) St. Thomas has a vision of Christ when praying at an altar; (17) the reconciliation of St. Thomas and Henry II; (18) St. Thomas recrosses the Channel to England; (19) St. Thomas at table, when a messenger announces the arrival of the four knights; (20) the martyrdom of St. Thomas; (21) the burial of St. Thomas; (22) St. Thomas brought kneeling before Christ in heaven.

³ The scenes depicted in these illuminations are as follows, in chronological sequence: (1) fol. 1r. (A) Henry II expelling the friends and relations of St. Thomas; (2) (B) St. Thomas lying ill from too much starvation at Pontigny; (3) Iv. The parting of St. Thomas and Pope Alexander III;

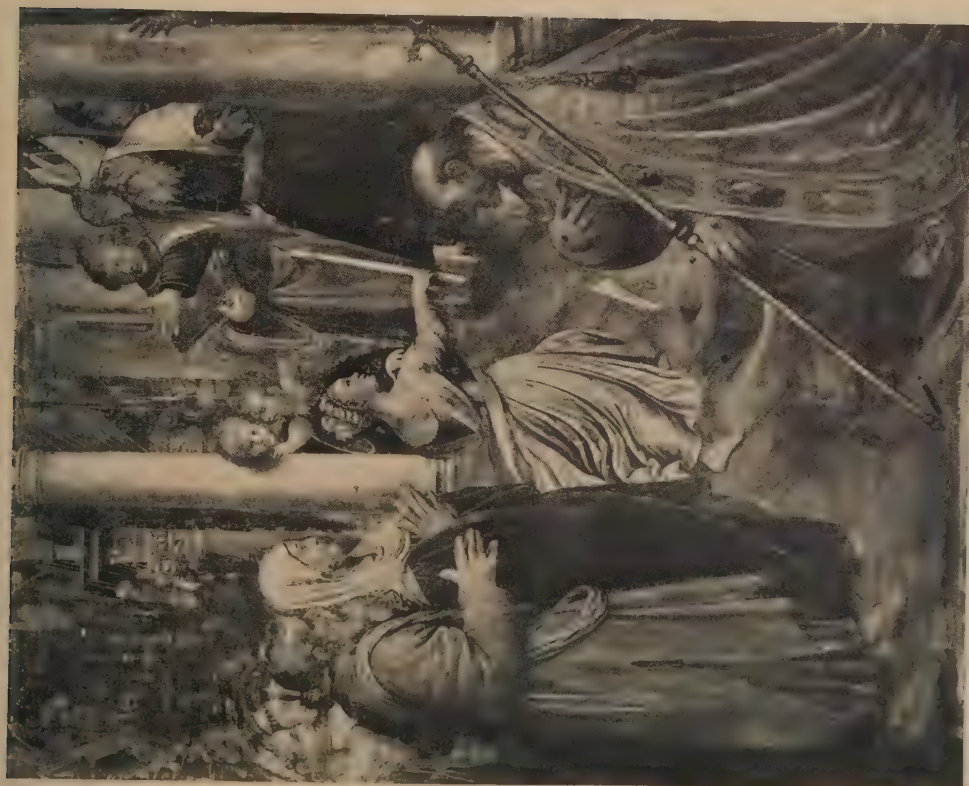


Fig. 1. Picture by Girolamo da Treviso (1499-1544), San Salvatore, Bologna

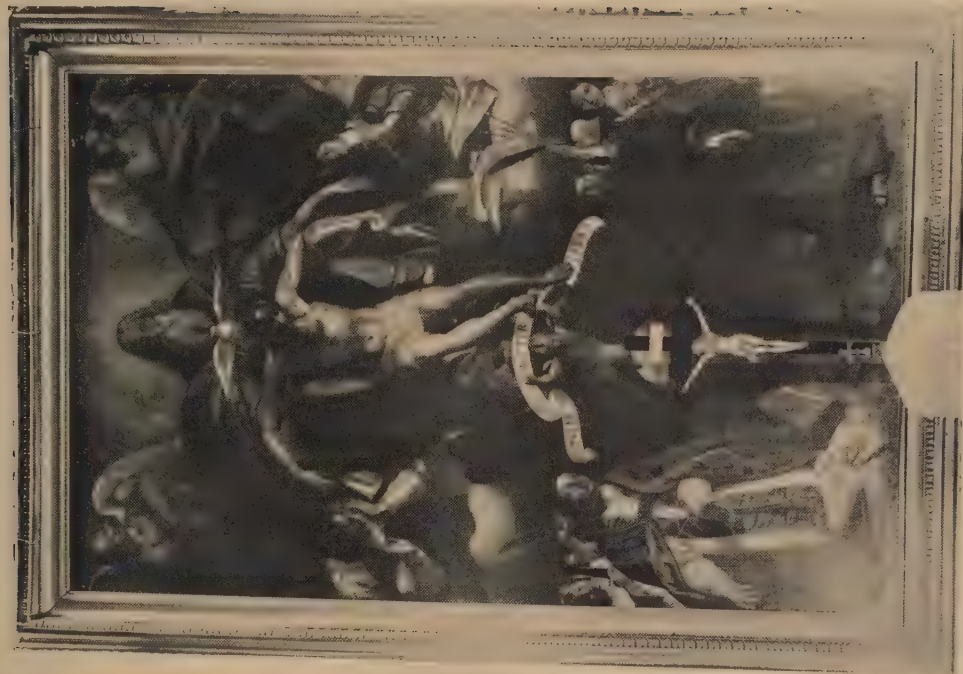


Fig. 2. Picture by Durante Alberti (1548-1613), Venerable English College, Rome

Published by the Society of Antiquaries of London, 1929

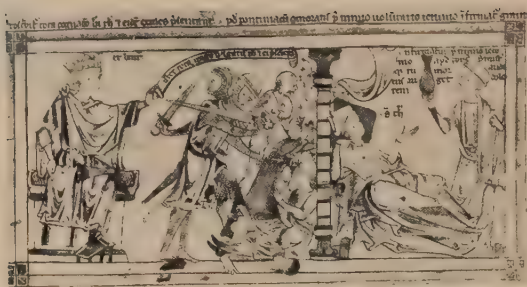


Fig. 1. Expulsion of St. Thomas's Kindred—
St. Thomas lying ill from starvation



Fig. 2. Parting of St. Thomas and Pope
Alexander III



Fig. 3. St. Thomas pronouncing sentence of ex-
communication—St. Thomas addressing
Henry II and Louis VII

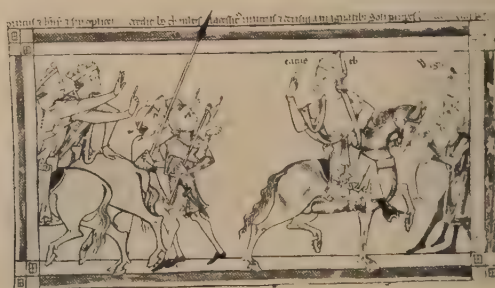


Fig. 4. Parting of St. Thomas and the two kings



Fig. 5. Coronation of Henry, the king's son—
Coronation Banquet



Fig. 6. The news of the coronation
reaches St. Thomas and the Pope



Fig. 7. St. Thomas embarking for England though
warned by the Count of Boulogne



Fig. 8. St. Thomas landing at Sandwich

ILLUMINATIONS ILLUSTRATING 'A LIFE OF ST. THOMAS BECKET'
POSSIBLY SCHOOL OF MATTHEW PARIS, c. 1230-50



Fig. 1. Stained glass window, Chartres Cathedral. c. 1206



Fig. 2. The Martyrdom of St. Thomas Becket. Detail of Chartres stained glass window. c. 1206



Fig. 3. Wall paintings, St. Mary's Church, Stow, Lincolnshire



Fig. 4. Wall paintings, Brunswick Cathedral. First half of thirteenth century



Fig. 1. Engraving, dating from 1731, of the 'Thomasaltar' by Meister Francke (1434)



Fig. 2. The Mob insulting St. Thomas Becket
By Meister Francke. Kunsthalle, Hamburg



Fig. 3. The Martyrdom of St. Thomas Becket
By Meister Francke. Kunsthalle, Hamburg

of the life of St. Thomas are also extant: in Canterbury it is, of course, now mainly a matter of posthumous scenes, of miracles worked by the saint after

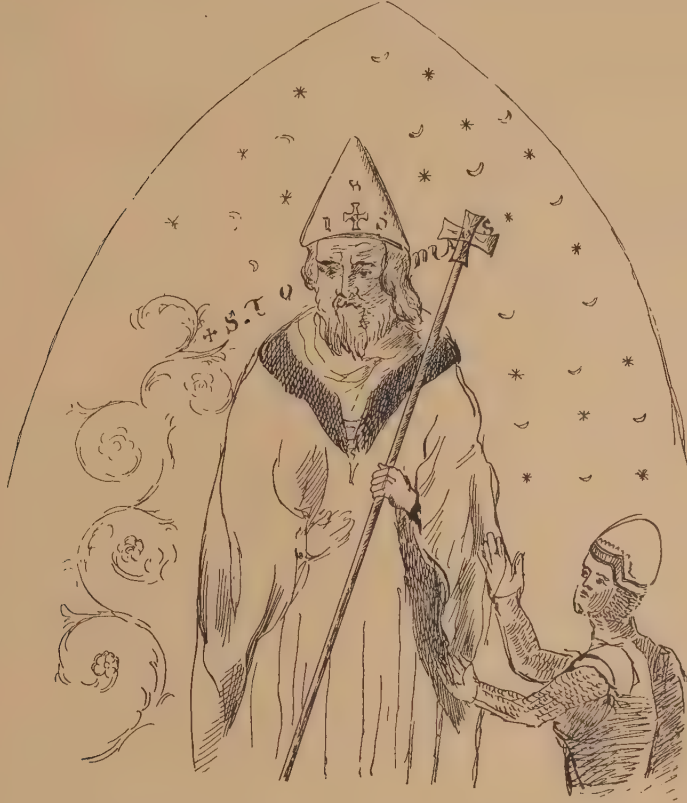


Fig. 10. Wall-painting formerly in the church of Stoke d'Abernon, Surrey.

his death. But quite apart from the fragmentary series of scenes from his life and of miracles in the north window of the Chapter house of York minster,¹

(4) II r. (A) St. Thomas pronouncing sentence of excommunication ; (5) (B) St. Thomas addressing Henry II and Louis VII of France ; (6) II v. The parting of St. Thomas and the two kings ; (7) III r. (A) Roger of York crowning Henry, the king's son ; (8) (B) The Coronation Banquet, Henry II serving his son ; (9) III v. The news of the coronation reaches St. Thomas and Pope Alexander ; (10) IV r. St. Thomas embarking for England at Wissant though warned by Milon, Count of Boulogne ; (11) IV v. St. Thomas landing at Sandwich. The story of the priest who would only chant the Mass of the Virgin and was suspended by St. Thomas, but afterwards, through the intervention of the Virgin, reinstated, is illustrated in the Brailes *Horae* in Mr. Dyson Perrins's collection, in a Bible in the British Museum (I. D. i), and in Queen Mary's Psalter.

¹ Compare on this window F. Harrison, *The Painted Glass of York*, 1927, pp. 52 and 206. For individual panels of stained glass in York Minster relating to St. Thomas Becket, see *ibid.*, pp. 86 sq., 89, 209, 217.

and of two panels, fragments of a larger series in the Bodleian Library,¹ the life of St. Thomas figures very prominently to this day among the subjects of some of the finest French stained glass of about 1200. The cathedrals of Sens² and Chartres³ both contain glorious windows of this period, setting forth at great length the varied and dramatic episodes of St. Thomas Becket's life; while to the fourteenth century belong the remnants of a series in the church of Saint Ouen at Rouen.⁴ Reproductions are here given of the top portion of the great Chartres window⁵ and of the scene of the murder (pl. XIII, figs. 1-2) which is in this instance combined with a symmetrically arranged scene at the saint's tomb above it, cripples having gathered round the body of the dead martyr; and this is of particular interest, in connexion with a certain scheme of decoration which we can observe on Limoges châsses, and of which I shall have more to say anon.

¹ On these, compare John A. Knowles in *The Bodleian Quarterly Record*, vol. v, no. 52, 4th Quarter, 1926, pp. 100-4.

² The sequence of subjects in the Sens window (the first in the north ambulatory, date c. 1190) is as follows (proceeding from below to the top, and from left to right): (1) reconciliation effected by King Louis VII of France between St. Thomas and Henry II; (2) St. Thomas landing in England; (3) entry of St. Thomas into Canterbury; (4) St. Thomas received by the clergy; (5) St. Thomas preaching; (6) St. Thomas saying mass; (7) St. Thomas receiving a letter from Henry II; (8) St. Thomas receiving the king's envoys; (9) St. Thomas consecrating a church; (10) St. Thomas confirming; (11) martyrdom of St. Thomas; (12) burial of St. Thomas; (13) Christ receiving the soul of St. Thomas. It will be noticed that the story begins with the departure of St. Thomas from Sens. It has been suggested (see E. Chartraire, *La Cathédrale de Sens*, Paris, 1928, p. 85, n. 1) that another window originally dealt with the earlier part of St. Thomas's life.

³ The Chartres window dates from about 1206; it was founded by the Corporation of Tanners, and is the fifth window in the *Chapelle des Confesseurs* on the right-hand side of the north transept. The sequence of episodes is as follows: (1) expulsion of St. Thomas; (2) expulsion of St. Thomas's kindred; (3) St. Thomas before a king; (4) St. Thomas on horseback, accompanied by another person, arriving at a city gate (there now follow three 'signature' panels relating to the Corporation of Tanners); (8) consecration of St. Thomas; (9) St. Thomas addressing Henry II, into whose ear a little devil speaks; (10) St. Thomas embarks, leaving England; (11) St. Thomas and Pope Alexander III conversing seated side by side; (12-13) St. Thomas leaves Pontigny; (14) St. Thomas converses with King Louis VII of France; (15) the pope, a king, and St. Thomas (a scene difficult of explanation on strictly historical data); (16) St. Thomas recrosses the channel and arrives at Canterbury; (17) Henry II talking to one of the bishops inimical to St. Thomas; (18) refusal of the young King Henry to receive St. Thomas; (19) St. Thomas conversing with the four knights; (20) St. Thomas entering the cathedral; (21) the four knights waiting for St. Thomas; (22-3) the martyrdom of St. Thomas; (24-5) scenes round the tomb of St. Thomas. In the interpretation of the scenes I have followed the Abbé Y. Delaporte in his volume of text to M. Houvet's photographs of the stained glass at Chartres.

⁴ The subjects occurring in this window, which is the second of the ambulatory (counting from the north transept) are: St. Thomas before King Henry II; the break between the archbishop and the king; martyrdom of St. Thomas. Cf. André Masson, *L'Église Saint Ouen de Rouen*, 1927, p. 78.

⁵ I have to thank M. Étienne Houvet of Chartres for permission to reproduce these illustrations and plate XVII, fig. 5 from his admirable photographs.

As to the wall-paintings of a series of successive incidents from the life of St. Thomas, there is a suggestion as to the existence of one such series in England which has been assigned to the thirteenth century.¹ The paintings in question surround the former altar of St. Thomas Becket in the south transept of the church of the Hospital of St. Cross in Winchester, but all that now can be deciphered of these paintings is a fragment of the scene of the murder, and reasons of space preclude the possibility of the series ever having been an extensive one. Then we can point to the existence of wall-paintings of *two* scenes of Becket's life—the murder and the supper which preceded it—flanking a figure of the saint (pl. XIII, fig. 3), in St. Mary's Church, Stow, Lincolnshire,² but that is, as far as I am aware, all. One would have imagined that there must have existed many series in this country, but none survives. There does exist, however, in Germany a most remarkable series of early wall-paintings, illustrating the life of St. Thomas Becket (pl. XIII, fig. 4). This picture-chronicle forms part of the extensive scheme of wall-decoration, carried out in the first half of the thirteenth century, in the cathedral of Brunswick—a church which stood in a particularly close relationship to the veneration of St. Thomas Becket. It was consecrated in 1226, on December 29, the day of St. Thomas, who had been made one of the patron saints of the cathedral by Heinrich of Brunswick, called 'der Pfalzgraf', whose mother, Matilda, was a daughter of Henry II of England; so there was an association with St. Thomas Becket on two counts—the tie of relationship with Henry II on the one hand, and the Guelph tendencies of the House of Brunswick on the other. In consequence, representations of St. Thomas Becket are of frequent occurrence in Brunswick.³

The paintings in Brunswick Cathedral were, unfortunately, very drastically repainted in the last century; but even so they remain of the utmost interest and importance. The scenes from the life of St. Thomas occupy a long frieze-

¹ The suggestion referred to is the following statement in Mr. Keyser's *List of Buildings having Mural Decorations*, 1883, p. 282, under 'Chapel of the Hospital of St. Cross': 'S. transept . . . E. Wall: within an arched recess, the Crucifixion; and above, under a series of trefoil-headed arches, events in the life, and the martyrdom of St. Thomas à Becket. 13th cent.'

² An account of these wall-paintings, which were uncovered in 1866, and now, as Mr. P. M. Johnston tells me, are very greatly faded, is given in the *Associated Architectural Societies Reports and Papers*, 1866, vol. viii, pt. ii, p. 249 sq., together with a woodcut, from which our reproduction is taken.

³ Compare in addition to the wall-paintings in the cathedral, the engraved back of a fourteenth-century reliquary in the Welfenschatz, containing three patron saints of the cathedral, namely, St. John the Baptist, St. Blaise, and St. Thomas Becket (reproduced in W. A. Neumann, *Der Reliquienschatz des Hauses Braunschweig-Lüneburg*, Vienna, 1891, p. 17); a silver book-cover of 1326 decorated with bas-reliefs, also in the Welfenschatz, on which St. Thomas Becket is one of five saints surrounding the Virgin and Child (reproduced *ibid.*, p. 241); two statues on the Egydienkirche; the altarpiece in the quire of the Minderenkirche (S. Ulrich); and the seal of the diocese of St. Blasien, of about 1338 (cf. W. A. Neumann, *loc. cit.*).

like space on the south wall of the quire, underneath two similar friezes containing scenes from the lives of St. John the Baptist and St. Blaise. Seven scenes are represented, namely, from left to right: St. Thomas crowned as archbishop; St. Thomas disputing with Henry II, the scene being probably intended for the Council of Northampton (October 1164) seeing that the next scene shows him escaping on horseback. The next scene is not quite easy of explanation: it shows a king, no doubt Henry II, addressing a group of people—possibly we have here a rendering of the sentence of exile pronounced upon the relatives of St. Thomas, after his flight to France—such a scene does occur among the illuminations of the Goethals-Danneel manuscript and Queen Mary's Psalter.¹ There follows the interview between St. Thomas and Pope Alexander III at Sens (November 1164); then the Reconciliation of Henry II and St. Thomas at Frêteval in Normandy (July 1170); and finally the Martyrdom—St. Thomas kneeling at an altar, while a man behind him brandishes a sword, three others being partly visible. Though, as I have already remarked, unfortunately much restored, these wall-paintings at Brunswick must rank among the most important documents for the iconography of St. Thomas. The wonder is that there should exist no parallel to this series anywhere; and we can scarcely imagine that it does not reflect an iconographical tradition which by that time had obtained a wide diffusion.²

Coming now to series of several panel pictures relating to the life of St. Thomas Becket, I know of but three instances, all again associated with Germany, though of considerably later date than the Brunswick wall-paintings. The earliest of these series forms part of one of the most notable productions of German fifteenth-century painting—the altarpiece dedicated to St. Thomas Becket, which Meister Francke of Hamburg in 1424 undertook to paint for the

¹ In this connexion it may be noted that the early biographers of St. Thomas give an account of the hospitality extended to these exiles, thanks to the intercession of St. Thomas Becket, in various parts of Europe, but notably in Sicily; and indeed all over Italy there exist families claiming descent from St. Thomas Becket's relatives. The inscription on the tomb of a member of the Becchetti family, in the church of S. Tommaso Cantuariense at Verona, is worth quoting in the present context:

TUO HOC IN TEMPLO | CANTUARIENSIS ANTISTES, | THOMA SANCTE | AGNOSCE, ET ACCIPE, | TUUM CERTUM GENUS | IO BAPTISTAM BECHETUM FABRIANUM, | HONORATISS. HOMINEM | HIERONYMUS ALBERTUS F. MARTYR | MOERENTES FILII MOERENTES | FECERE | MOERENTI PATRI MOERENTI | SIBIQUE, SUISQUE |

See G. B. Cola, *Vita di S. Tomaso Arcivescovo di Cantuaria e Martire*, Lucca, 1696, p. 179.

² It may be noted that a series of thirteenth-century frescoes in the chapel known as the 'grotta di San Tommaso' in the cathedral of Anagni may have illustrated the life of St. Thomas Becket. At least this is the reference to them in Signor Toesca's paper in *Le Gallerie Nazionali Italiane*, vol. v (1902), p. 182: 'Sul muro di fronte sono affrescate alcune storie ora troppo deperite perchè se ne possa facilmente riconoscere il soggetto: forse esse si riferiscono a San Tommaso, chè nell'ultima scena appaiono soldati irrompenti con le spade sguainate in un tempio mentre la turba del popolo fa gesti d'orrori.'

Hamburg Confraternity of the 'Englandsfahrer'. From a very inaccurate engraving (pl. xiv, fig. 1), dating from 1731,¹ we know that the wings of this altarpiece, the Thomas altar as it is called, when closed displayed eight pictures, viz. four from the life of the Virgin and four from the life of St. Thomas Becket. These latter scenes were: (1) the enthronement of St. Thomas; (2) the mob insulting St. Thomas; (3) the murder of St. Thomas; and (4) a scene concerning which something must have gone wrong in the engraving; for it represents the saint kneeling, in a harbour city, before a royal crown placed on a cushion. The order must, I think, for one thing be wrong, inasmuch as the scene follows *after* the murder; and further I can trace no incident corresponding to this scene in the life of the saint, who did, of course, frequently enough cross the Channel. But this engraving was evidently far from accurate, as we can see by comparing it with the two panels of the series which have survived, and which are now in the Hamburg Museum. The one (pl. xiv, fig. 2) which chronologically comes first, Dr. Lichtwark, the learned author of the standard monograph on Meister Francke, interprets as the Flight of St. Thomas, saying that it has been impossible to make the subject tally with any incident of the saint's legend.² What we see is St. Thomas, with two companions on horseback, jeered at by a mob, one man of which has cut off the tail of St. Thomas's horse. It is really not quite accurate to describe the scene as the Flight of St. Thomas; what the artist has depicted is an incident, connected by popular tradition with the town of Strood, near Rochester, where the people insulted Becket as he rode through the town, by cutting off the tails of his horses. For this, tradition has it that the descendants of the people who did it were punished by being ever after born with horse's tails; indeed there is a tradition traceable in Spain that *all* Englishmen, but especially the inhabitants of Kent, are born with tails for curtailng Becket's mule. Concurrent with this story, and rather better authenticated, is the account handed down by William FitzStephen, that right at the end of St. Thomas's life, after his return to England—on Christmas Eve, 1170, to be quite accurate—Robert de Broc of Saltwood sent out his nephew John to waylay and cut off the tail of a sumpter mule and a horse belonging to St. Thomas. It may be noted that this particular insult weighed heavily on St. Thomas's mind; indeed he referred to it in his last interview with his murderers, shortly before the tragedy: 'They have attacked my servants, they have cut off my sumpter-mule's tail, they have carried off the casks of wine that were the King's own gift.' The presence of this scene in the Hamburg altarpiece is another proof of the fitfulness of the material for the iconography of St. Thomas Becket

¹ Nicolaus Staphorst, *Historia Ecclesiae Hamburgensis*, pt. i, vol. iv (Hamburg 1731), plate facing p. 64.

² Alfred Lichtwark, *Meister Francke* (Hamburg 1899).

as now existing; we cannot trace it anywhere else, and it is an episode concerning which the *Golden Legend* is silent.

The other picture of this series by Meister Francke, which has come down to us (pl. xiv, fig. 3), is of a much more familiar subject—the martyrdom of St. Thomas: and I think it cannot be gainsaid that it is the finest pictorial interpretation which has been inspired by this oft-represented scene. Iconographically the composition is of considerable interest, inasmuch as it shows *three* of the archbishop's friends present—a number which, as we shall see, is quite accurate in the sense that three of his friends actually witnessed the beginning of the tragedy. This rare feature, taken together with the inclusion of the scene of the mob insulting St. Thomas, points to very accurate information concerning the life of the archbishop having been possessed by the person who set the subjects for the *Thomasaltar*.

Next in date to this series follow a couple of scenes painted by the great Tyrolese master Michael Pacher (first recorded in 1467, died in 1498) on the outer sides of two panels (nos. 24, 25) in the Museum at Graz. The subjects depicted are the Murder of St. Thomas and the Funeral of the Saint. In the former scene, three knights and several witnesses of the event are introduced; the funeral takes place in the Cathedral, with several people present and some angels descending from Heaven. As the inner faces of the panels each contain the symbol of an evangelist, it is possible that Pacher had painted four scenes from the life of St. Thomas, though only these two remain.¹

The only other instance known to me of a series of panel pictures of the life of St. Thomas Becket is of much less importance artistically: it occurs on the wings of an altarpiece of the late fifteenth century, dedicated to the three St. Thomases—St. Thomas the Apostle, St. Thomas Becket, and St. Thomas Aquinas—in the church of St. Jürgen at Wismar in Mecklenburg. When opened (pl. xv, fig. 1) the altarpiece contains in the centre three figures in carved wood of the three saints—St. Thomas Aquinas in the centre, on the left of him the Apostle, and on the right St. Thomas Becket, in bishop's robes, mitred, holding the crozier and a model of a church; the bas-reliefs on the wings represent scenes from the life of St. Thomas Aquinas. When the outer wings are opened, and the inner wings closed, each wing contains four scenes from the life of a saint, that on the left St. Thomas the Apostle, that on the right St. Thomas Becket (pl. xv, fig. 2). The compositions are, in certain cases, full of minute incidents not altogether easy to interpret, but as far as I can

¹ I have to thank Dr. Buchner of Cologne for drawing my attention to these very notable pictures; they will be found reproduced in W. Suida, *Die Landesbildergalerie . . . in Graz*, Vienna, 1923.



Fig. 1. The three St. Thomases and scenes from the Life of St. Thomas Aquinas



Fig. 2. Scenes from the Lives of St. Thomas the Apostle and St. Thomas Becket

ALTAR-PIECE, CHURCH OF ST. JÜRGEN, WISMAR, MECKLENBURG
LATE FIFTEENTH CENTURY



Fig. 1. Counter-seal of Hubert Walter, archbishop of Canterbury 1193-1205. Fig. 2. Counter-seal of Stephen Langton, archbishop of Canterbury 1207-28. Fig. 3. Counter-seal of Richard Grant, archbishop of Canterbury 1229-31. Fig. 4. Counter-seal of Edmund Rich, archbishop of Canterbury 1233-40. Fig. 5. Seal of Thomas Arundel, archbishop of Canterbury 1397-1419. Fig. 6. Seal of the Prerogative Court of Archbishop Wareham, 1504-32. Fig. 7. Seal of the Prerogative Court of Cardinal Pole, 1555-8. Fig. 8. Seal of the Prerogative Court of Archbishop Cranmer, *sede vacante* during his imprisonment (1553-5). Fig. 9. Seal of Arbroath Abbey, Angus (13th century). Fig. 10. Reverse of the third seal of the Cathedral Priory of Canterbury, 1233.

make out, the pictures represent (1) the enthronement of St. Thomas; (2) Henry II driving St. Thomas into exile—in the background he is, I think, kneeling before the pope at Sens, as in the Brunswick wall-painting; (3) St. Thomas accompanied by two acolytes, I suppose about to meet his murderers; and (4) the shrine of St. Thomas surrounded by worshippers.

A curious fact in this connexion is that, so far as I know (and I have also consulted Dr. Friedländer on the point) there exist no Early Flemish pictures either of the life of St. Thomas Becket or of a single incident of it. There is a picture in the collection of the Duke of Devonshire, famous in the annals of art-history on account of the forged inscription it once bore, purporting that it was a work by Jan van Eyck. This picture used to be interpreted as the enthronement of St. Thomas Becket, but it is now with greater reason and doubtless rightly regarded as representing the enthronement of St. Romold, archbishop of Dublin.

In sculpture, France can show an elaborate chronicle of St. Thomas's life in stone in the late thirteenth-century bas-relief above the gate of the southern transept of the cathedral of Bayeux (pl. xvii, fig. 1). An interpretation of the scenes which are represented in three tiers is rendered somewhat difficult by the mutilation which many of the figures have suffered; but we have in all probability here: (i) the council at Northampton and next to it the arrival of St. Thomas in France, greeted by King Louis VII; above this (ii) St. Thomas crossing back to England, proceeding on horseback to Canterbury, and being murdered; and at the top (iii) a scene at the tomb of St. Thomas.¹

Of all the scenes connected with the life of St. Thomas, it was, however, for obvious reasons, the martyrdom upon which attention in the first instance centred—the subsequent incident of the penance of Henry II was also repre-

¹ The question whether the life of St. Thomas Becket was represented in sequences of panels on English alabaster retables is one of considerable interest. Though no such retable has survived, there is of course every probability *prima facie* that retables of this type did exist; and there is also more definite evidence pointing in the same direction—namely the survival of individual panels portraying various scenes from the life of St. Thomas Becket. The martyrdom of St. Thomas Becket is thus represented on four alabaster panels which have come down to us—on this point further details are given below, p. 47. The council at Northampton is represented on an alabaster table in Elham church, Kent (see *Ill. Cat. Exhib. English Medieval Alab. Work, Soc. Ant.*, 1913, no. 39, pl. xviii; and P. Nelson, in *Trans. Hist. Soc. Lancs. and Ches.*, 1917, p. 87; see pl. vii). There are, moreover, in existence alabaster panels, such as the two in St. Louis-en-l'Isle in Paris, representing the birth and burial of an archbishop (see P. Nelson, *loc. cit.*, p. 89 sq., and pl. ix), one in Dr. Hildburgh's collection, representing the consecration of an archbishop (see the *Antiquaries Journal*, vol. i, 1921, p. 227 sq.), and one in St. Mary's, Nottingham, representing the meeting of an archbishop and a pope (P. Nelson in *Archaeological Journal*, vol. lxxv, 1918, p. 332, pl. xxiv) all of which might represent scenes from the life of St. Thomas Becket.

sented with some frequency,¹ but nothing like as freely as the murder, which, it is interesting to note, at Canterbury and elsewhere used to be enacted as a pageant.² Before we go on to examine the individual representations of the martyrdom, I may perhaps be allowed to recall a few of the salient facts connected with it. The actual murderers were four: Reginald Fitzurse, Hugh de Moreville, William de Tracy, and Richard le Bret or Breton; and with them a degraded clerk, Hugh of Horsea, was present—it was he, in fact, who after St. Thomas had been slain, put his foot on the neck of the archbishop and scattered his brains over the pavement. Of his friends, three were with him at the beginning—Robert of Merton, William FitzStephen, and Edward Grim; and it was Grim who stood by him longer than any of the others, and in the struggle had one of his arms almost severed. Again, at no time after the irruption of the knights was St. Thomas praying at an altar, let alone saying mass: he first challenged the invaders from the steps leading down to the transept, and the actual struggle (in which the archbishop gave a very good account of himself) took place in the transept between a pillar and the wall forming one of the corners of the chapel of St. Benedict. The murderers were armed with axes and swords—Fitzurse had a sword in one hand and an axe in the other, eventually discarding the axe: he struck the first blow, which, however, only dashed off St. Thomas's cap. The *last* blow—which severed the crown of St. Thomas's head—was delivered by Richard le Bret, whose sword broke in two on striking the marble pavement. As to what St. Thomas wore on this occasion, we are told it was a white rochet with a cloak and hood over his shoulders.

The list of the different categories into which the representations of the martyrdom fall is in itself a lengthy one. We have to deal with pilgrims' signs in lead and pewter, seals and other metalwork, sculptures in stone, wood-carvings, ivories, stained glass, embroideries, illuminations, enamels, woodcuts, easel pictures and wall-paintings.

The extensive and interesting category of seals is of particular importance, inasmuch as it includes the earliest more or less definitely datable representation of the murder: namely, the counter-seal of Hubert Walter, archbishop of Canterbury between 1193 and 1205 (pl. xvi, fig. 1). The composition includes

¹ Without entering in this connexion upon a discussion of the complex subject of the penance of Henry II in art, I may note in passing the interesting suggestion recently made by Mr. Campbell Dodgson (see *The Burlington Magazine*, vol. liii, Oct. 1928, p. 203) that Dürer's woodcut of 1510 'The Penitent' (B. 119) may represent Henry II doing penance before the shrine of St. Thomas Becket. Unfortunately, however, there is nothing at all to indicate a kingly rank in Dürer's penitent.

² On these pageants, see Thomas Wright, 'On the Municipal Archives of the City of Canterbury', in *Archæologia*, vol. xxxi, 1846, pp. 207-9 (the date of the earliest pageant mentioned being 1504), and Dean Stanley, *Memorials*, p. 223, n. 2.

two murderers and Grim.¹ Next follows the counter-seal of Stephen Langton (archbishop 1207–28),² with *four* murderers and a dove descending from above (pl. xvi, fig. 2); while the counter-seal of Richard Grant of Wethershed (archbishop 1229–31) introduces a composition in two tiers (pl. xvi, fig. 3): above in the principal compartment a scene of the martyrdom with four murderers, below a very curious and indeed so far as I am aware unique feature: the heads of the horses of the four knights, held by two men.³ In the counter-seal of Edmund Rich of Abingdon (1233–40) this feature is replaced by a half-length profile of the archbishop praying (pl. xvi, fig. 4).⁴ Though there are many variations in detail, this became the standard type for the seals of the archbishops of Canterbury for quite a long time: of later examples, I reproduce (pl. xvi, fig. 5) the fine seal of Thomas Arundel (archbishop 1397–1414).⁵ The seal of the Prerogative Court of Archbishop Wareham (1504–32) shows a particularly dramatic scene of the murder in which St. Thomas is kneeling facing the spectator and the coat of arms of the archbishop replaces the figure of the bishop below (pl. xvi, fig. 6). Two kindred post-Reformation examples here reproduced are the seal of the Prerogative Court of Cranmer, *sede vacante* (1553–5) during the imprisonment of the archbishop (pl. xvi, fig. 8); and the seal (pl. xvi, fig. 7) of the Prerogative Court of Cardinal Pole (1555–8), in both of which the scene of the murder—after its excision in the seals of the archbishops of Canterbury and elsewhere—reappears. A particularly interesting seal iconographically is the reverse of the third seal of the Cathedral Priory of Canterbury, made in 1233 (pl. xvi, fig. 10), in which the scene of the murder is displayed in four arcades of the front of the cathedral: in the centre, two murderers, St. Thomas, and Grim, on the left two more murderers, on the right two friends of St. Thomas—a very unusual feature.⁶ Outside Canterbury there would be a number of interesting seals to quote; considerations of space prevent me from referring to more than two, the fine thirteenth-century seal of Arbroath Abbey, Angus (pl. xvi, fig. 9), and that, belonging to the same century, of the Priory of St. Mary, Langdon, Kent, of which the bronze matrix exists in the British Museum.

Of the examples of other metalwork, much the most notable is, I think, the fine reliquary in the church of Heidal, Valdres, Norway (pl. xvii, fig. 2), in all

¹ See W. de G. Birch, *Catalogue of Seals in the Department of MSS. in the British Museum*, vol. i (1887), no. 1187.

² Birch, *op. cit.*, no. 1196.

³ *Ibid.*, no. 1201, misinterpreting the horses as 'shields(?)'. The correct interpretation has been pointed out to me by Mr. H. S. Kingsford, to whom I am much indebted for information regarding seals bearing on the iconography of St. Thomas Becket.

⁴ *Ibid.*, no. 1202.

⁵ *Ibid.*, no. 1238.

⁶ *Ibid.*, no. 1373. The friends of St. Thomas are here misinterpreted as knights.

probability the work of a Norwegian craftsman of about 1250.¹ The accuracy of the representation here is considerable: there are five assailants, which is correct if we add Hugh of Horsea to the number; on the archbishop's side there are three people present; the archbishop's cap is shown falling to the ground, and the sword of one of the assailants breaks as he strikes the archbishop's head; Grim is represented carrying the archbishop's cross-staff, which is strictly inaccurate, but had by this time become the tradition—a tradition indeed, incorporated in the *Golden Legend*; and the altar with the chalice and the dove of the Holy Ghost gives a suggestion that mass was being said, which is a very frequent, but historically quite inaccurate, feature in these representations.²

Of sculpture in stone, Scandinavia offers another example (pl. xvii, fig. 4), which is very notable for one thing on account of its date, which has been put as early as 1190–1200: it occurs on a font in the church of Lyngsjö in the Province of Skåne in Southern Sweden.³ The representation here actually begins with the interview between Henry II and one of the knights; then another is seen hurrying away; and finally two are seen attacking the archbishop in the presence of Grim; the chronicle of the event being rounded off by the reception of the saint in heaven. The presence of this subject on a Scandinavian font is all the more remarkable as no parallel to it exists on any English font. At Chartres, among the bas-reliefs of the North Door (c. 1250) we see a representation of the murder, with only two assailants present (pl. xvii, fig. 5); and in England the subject was repeatedly represented in the bas-reliefs of ceiling bosses—there is one instance in Chester Cathedral, and a particularly fine one at Exeter (pl. xvii, fig. 3), in which the full normal complement of actors in the drama is seen—four knights and Grim.⁴ The subject also occurs in the much decayed late fifteenth-century bas-reliefs on the tower

¹ I am indebted to Dr. Haakon Shetelig for supplying me with the photograph from which the reproduction is made, and for drawing my attention to the fact that this *châsse* and other examples of kindred character in Norway have lately been discussed by Dr. Thor Kielland, *Norsk Gullsmidekunst i Middelalderen*, Oslo, pp. 97–115.

² Of pewter pilgrims' ampullae containing representations of the murder, five are reproduced in figs. 1, 2 (Guildhall Museum), 7–9 (British Museum). In the Musée de Cluny there is a notable example, from the Victor Gay Collection, showing the murder and another scene with St. Thomas seated, mitred, and addressing some clerics (reproduced in V. Gay, *Glossaire archéologique*, i, p. 30).

³ Compare Lars Tynell, *Skånes medeltida dopfuntar* (Stockholm, 1913), p. 33 sq. and pl. viii, 1–2. See also Romilly Allen in *The Reliquary*, 1906, pp. 126–31. The photograph here reproduced has been most kindly placed at my disposal by Professor Otto Rydbeck of Lund.

⁴ For the excellent photograph from which this reproduction is taken I have to thank Mr. C. J. P. Cave, F.S.A. Mr. H. C. Whaite has drawn my attention to a bas-relief on the double piscinain the chapel of St. Thomas Becket in St. Davids cathedral, which may be a fragment of a representation of the murder.



Fig. 1. Tympanum. Bayeux Cathedral
Late thirteenth century



Fig. 3. Ceiling boss. Exeter Cathedral
fourteenth century



Fig. 2. Reliquary. Heidal, Valdres, Norway. c. 1250

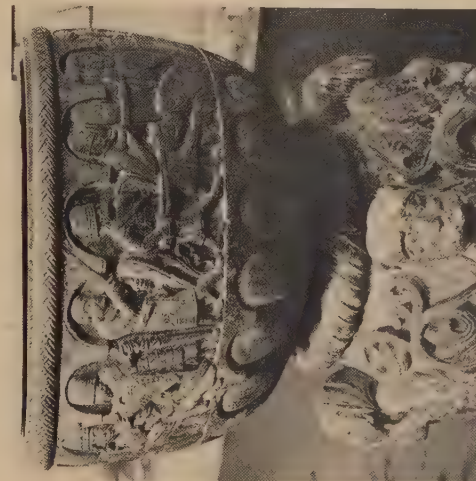


Fig. 4. Font. Lyngsjö, Sweden. 1190-1200



Fig. 5. Bas-relief. North door,
Chartres Cathedral. c. 1250



Fig. 1. Alabaster Table
British Museum
Fifteenth century

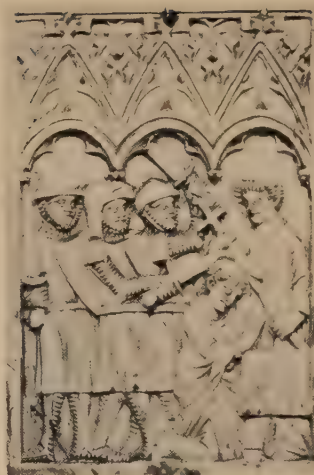


Fig. 2. Ivory Plaque
Victoria and Albert Museum
Fourteenth century

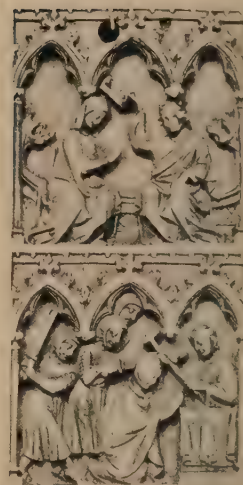


Fig. 3. Leaf of Ivory Diptych
Victoria and Albert Museum
Fourteenth century

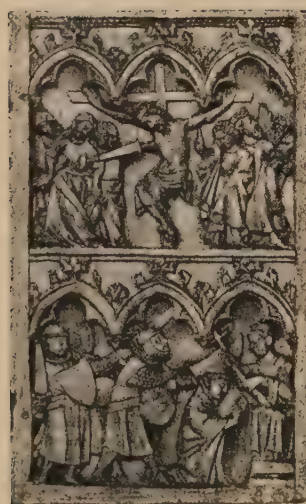


Fig. 4. Leaf of Ivory Diptych
Late Homberg Collection
Fourteenth century



Fig. 5. Embroidered Mitre
Munich, Bavarian National Museum
Fourteenth century

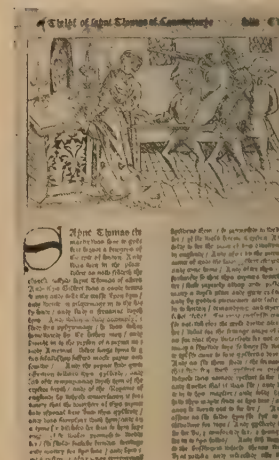


Fig. 6. Woodcut
William Caxton's *Golden Legend*, 1483

of the church of St. Mary at Burnham Market, Norfolk.¹ Of alabaster panels the number must originally have been very large, though I only know of four surviving examples: one in the British Museum (pl. xviii, fig. 1), one in the possession of Mr. F. J. Savile Foljambe,² one in the Rouen Museum,³ and one in the collection of Mr. Frank J. Gould (this last dated 1460).⁴ As to ivories, I know of five examples, all dating from the fourteenth century: two in the Victoria and Albert Museum (pl. xviii, figs. 2-3), one in the Figdor Collection, Vienna,⁵ one in the late Homberg Collection (sale in Paris, 1908, no. 486) (pl. xviii, fig. 4),⁶ and one in the Fitzwilliam Museum at Cambridge, McClean Bequest, no. 41.⁷ It is, of course, not a large number; but relatively not inconsiderable if one bears in mind how very rarely subjects from the lives of the saints occur on ivories of this period.⁸ As to embroideries, I can only briefly refer to the inclusion of the murder of St. Thomas among the subjects shown on some of the great examples of *opus anglicanum*—the copes in the Museo Civico at Bologna⁹ and the Lateran,¹⁰ and the dalmatic in the Cathedral of Anagni.¹¹ This scene was also at times embroidered on bishops' mitres, as may be seen from the fine example (pl. xviii, fig. 5) in the Bavarian National Museum at Munich.¹² There are analogous mitres in the Treasury of the Sisters of Notre Dame at Namur¹³ and in the Cathedral Treasury at Sens.¹⁴ Again, of the category of woodcuts, which is plentifully made up from illustrations in Books of Hours, editions of the *Golden Legend*, etc., I will limit myself

¹ Compare on these the Rev. T. Felton Falkner in *Norfolk Archaeology*, vol. xvii (1910), pp. 277 sqq.

² Reproduced in *Ill. Cat. Exhib. Eng. Med. Alab. Work, Soc. Ant.*, 1913, pl. xxviii.

³ Reproduced in P. Nelson, 'Some Unusual English Alabaster Panels', in *Trans. Hist. Soc. Lancs. and Ches.*, 1917, pp. 80 sqq., pl. vii, 3.

⁴ Reproduced in P. Nelson, 'Some Unpublished Alabaster Carvings', in *The Archaeological Journal*, vol. lxxxii, pl. x, 1, facing p. 34.

⁵ R. Koechlin, *Les ivoires gothiques français*, 1929, vol. ii, no. 529 *ter*.

⁶ R. Koechlin, *u.s.*, no. 346 *ter*.

⁷ R. Koechlin, *u.s.*, no. 346 *bis*.

⁸ I have to thank Miss M. H. Longhurst, F.S.A., for valuable information bearing on this category of work.

⁹ Reproduced in L. de Farcy, *La Broderie*, pl. 27 (second numbering).

¹⁰ Reproduced in L. de Farcy, *op. cit.*, pl. 43.

¹¹ Reproduced by Mrs. A. H. Christie, 'A Reconstructed Embroidered Cope', in *The Burlington Magazine*, vol. xlviii (Feb. 1926), p. 73.

¹² Already Dean Stanley (*Historical Memorials of Canterbury*, 7th ed., 1875, p. 230, n. 1) has drawn attention to the fact that here above the scene of the murder appears the hand of God between two crescents, and associates this circumstance with the presence of the famous gilded crescent in the roof of Canterbury Cathedral above the shrine of the saint.

¹³ See Joseph Braun in *Zeitschrift für Christliche Kunst*, vol. xix (1906), pp. 291 sqq. (reproduction, p. 298).

¹⁴ See E. Chartraire, *Inventaire du Trésor de l'Église primatiale de Sens* (Sens, 1897), p. 49. In the Sens mitre, as in the one at Munich, the other side shows the martyrdom of St. Stephen.

to mentioning one instance of definitely English interest, though of no great iconographical importance (pl. xviii, fig. 6)—the woodcut which occupies the top of a page in Caxton's edition of the *Golden Legend* of 1483.

I am passing somewhat rapidly over these examples, as the two principal categories associated with the representation of the martyrdom of St. Thomas Becket are the champlévé enamels and the paintings; and of these I would like to treat at some length before concluding.

The wide diffusion of relics of St. Thomas inevitably led to a corresponding demand for receptacles for these; and this demand was, in a large measure, supplied by the Limoges enamellers of the thirteenth century.¹ The number of surviving Limoges châsses, either intact or more or less broken up, containing on the face a representation of the martyrdom of St. Thomas, is very large, and they can be traced throughout the length and breadth of Europe—from Sweden in the north to the kingdom of the Two Sicilies in the south. The Limoges châsses devoted to St. Thomas all date from the thirteenth century: at least I know of no examples dating from the twelfth century, and the series breaks off abruptly in the fourteenth. In that respect the St. Thomas châsses are, however, not peculiar, for the sudden extinction of the species of Limoges châsses in the fourteenth century is one of the most curious and inexplicable episodes of the history of medieval art. The scene of the murder of Becket lent itself well to the frieze-like treatment which was the natural one for the shape of the caskets, and which made another subject—the journey and adoration of the Magi—such a very popular one for the Limoges châsses. There is a number of variations in the treatment of the scene, and on the whole very little heed was paid to anything like historical accuracy. The altar with the chalice placed on it is thus very seldom absent; and on the other hand there is never any indication of Grim or the other friends of the archbishop. It is true that there exists in the Cathedral Treasury at Sens a châsse (pl. xix, fig. 1)—made up in the last century from different sources—the front of which shows the martyrdom of a bishop, who has been thought to be St. Thomas Becket and who is accompanied by two laymen who are being massacred by the four assailants. The general disposition of the scene well accords with that which we find in most martyrdoms of St. Thomas on Limoges châsses. The altar with the chalice is there, the Hand of God emerges from a cloud above on the right, blessing the martyr; and the axe figures prominently among the weapons

¹ Of other reliquaries connected with St. Thomas Becket we may here note that containing a relic of the Saint's arm and hence shaped as an arm, in silver, which used to be in the cathedral of Gravina in the south of Italy, near Bari (cf. P. Ughelli, *Italia Sacra*, 1717, vol. vii, col. 117). I have to thank Mr. A. Hamilton Smith, C.B., F.S.A., for this reference, as well as for a photograph of the comparatively recent reliquary which now replaces the old one at Gravina.

of the assailants. Above, on the roof of the *châsse*, is, as may frequently be paralleled, a symmetrical representation of the burial of the martyr; and the analogy of this arrangement with the top portion of the Chartres window is one that leaps to the eye. All things considered, in spite of the undoubted analogies here displayed to the St. Thomas Becket *châsses*, there is, however, every probability that M. Mayeux¹ has found the right solution when interpreting the scenes on the Sens *châsse* as relating to the legend of St. Savinianus, a martyr of local renown in Sens, who was slain together with two companions.

The only instance known to me of a *châsse*, the front of which shows a scene identifiable with the murder of St. Thomas Becket and including four assailants, therefore, is the noble *châsse* belonging to the Society of Antiquaries (pl. xix, fig. 2). Its provenance is Naples, where it was acquired by Sir William Hamilton in 1801, and the roof shows the burial of St. Thomas Becket. Much the largest groups among the material we are now surveying are those showing three or two assailants.² Of those containing three assailants, one is of particular interest since it forms part of the only *châsse* with a rendering of the murder of Becket which still remains in English ecclesiastical ownership, belonging as it does to Hereford Cathedral (pl. xix, fig. 3). Another kindred example, to judge by the style of considerably later date, is in the possession of the church of Trönö in Sweden (pl. xix, fig. 4). The examples next reproduced introduce us to a new type, inasmuch as the roof of the casket shows, not the actual entombment, but the soul of the deceased carried heavenwards in a halo by two angels. One example in which the assailants are three is in the Museum at Lyons (pl. xx, fig. 1); another, which shows but two assailants, is now in the British Museum (pl. xx, fig. 2) and is said originally to have had an English provenance and to have belonged to Croyland Abbey, Lincolnshire. Finally, we have to note the type of which again I know but a single instance, the

¹ See *Bulletin de la Société Nationale des Antiquaires de France*, 1923, pp. 140-5, 151-3.

² The following is a list of Limoges *châsses* known to me containing representations of the martyrdom of St. Thomas Becket in which *three* assailants appear: Guéret, Museum (reproduced Rupin, *L'œuvre de Limoges*, pl. xxxviii); Hereford Cathedral library; London, British Museum (front only); Lyons Museum (from the E. Odier collection); Paris, late Schevitch collection (sale, Paris, 1910, no. 185), late Spitzer collection, no. 236; Trönö church (Sweden); Utrecht, Archiepiscopal Museum, no. 907.

In the following examples *two* murderers occur: Berlin, Schlossmuseum; Clermont Museum; Escorial (reproduced in *Revue de l'Art Chrétien*, 1903, p. 299); Évreux, Doil collection; Hamburg, Museum für Kunst und Gewerbe (from the Bernal, Napier, and Johannes Paul collections); Limoges, Madame Fayette; London, British Museum (1) *châsse* from Croyland Abbey, (2) *châsse*, purchased 1854; Victoria and Albert Museum, front of *châsse* (4041-1856); Munich, A. S. Drey; New York, Metropolitan Museum of Art; Paris, Louvre, Donation Corroyer; M. Martin le Roy (reproduced in vol. i, pl. xix of the illustrated catalogue of the Martin le Roy collection, no. 23); M. A. Daguerre,

châsse, here reproduced (fig. 11), at St. Laurent de Vigean, Mauriac, Cantal: here there is but one assailant, and above are seen the angels with the soul of the dead, whilst at the back is the burial scene.¹ A further degeneration of the subject, iconographically speaking, is perhaps the one seen on a châsse in the Musée de Cluny (pl. xix, fig. 3), in which the slayers are two, but in which neither the setting of the scene nor the costume of the martyr points very



Fig. 11. ENAMELLED CHÂSSE.

Limoges, thirteenth century. St. Laurent de Vigean, Mauriac, Cantal.

definitely to St. Thomas Becket; still, as the scene has a vague relation to the murder of Becket and is accompanied by a burial scene on familiar lines, there is some excuse for thinking that Thomas Becket is the saint represented. On the other hand, there is also the martyrdom of St. Candidus, slain by two soldiers, as represented on the eleventh-century reliquary in repoussé silver at S. Maurice d'Agaune: and we have to admit the possibility that he, or indeed some other saint, may be the martyr represented in the Cluny châsse.

Of the paintings representing the murder of St. Thomas Becket, the illuminations form a group of great extent numerically, and also include a number of examples of great importance artistically. The earliest of these—dating from about 1190–1200—occurs in a psalter in the British Museum (Harl. 5102). It is an impressively silhouetted and strikingly dramatic composition which has been frequently reproduced, thereby becoming, as it deserves to be, a classic of the iconography of this subject (pl. xxi, fig. 1). The knights are four, Fitzurse being distinguished by his armorial bearings: Grim is present holding the cross-staff, and the cap of the archbishop is shown falling to the ground. A good deal later (c. 1233–50) is the illumination in the Carrow Psalter

late Schevitch collection (sale 1910, no. 188), Tollin sale, 1897 (no. 51, reproduced p. 20 of the sale catalogue) (plaque only); Rome, Treasure of the Lateran (reproduced in *Bollettino d'arte*, vol. iii, 1909, p. 32); Sigmaringen, late Hohenzollern collection; Vienna, Weinberger collection (sale, Oct. 24, 1929; formerly in the cathedral of Palencia); Zurich, A. Rüttschi collection.

¹ This châsse is here illustrated from the drawing in Rupin, *L'œuvre de Limoges*, p. 397.

(pl. xxi, fig. 2), which used to be in the collection of the late Mr. Yates Thompson, a scene of even greater animation, introducing the trampling on the body of the martyr, which tradition, as a matter of fact, associated with the person who accompanied the slayers, Hugh of Horsea; and as a notable rendering of about the same time we may further notice the tinted pen-and-ink drawing in Matthew Paris's *Historia Maior* in Corpus Christi College, Cambridge.¹ As time went by, the number of illuminations of this subject grew considerably, especially in Books of Hours, and the increasing realism was not invariably accompanied by proportionate historical accuracy. Reproductions are here given (pl. xxi, figs. 3, 4) of a couple of characteristic late renderings—each taken from a manuscript in the British Museum, Add. 17012 and King's 9—which serve to emphasize the strangeness of the absence of this subject among Flemish fifteenth- and sixteenth-century panel pictures. Among individual panel pictures of this subject I indeed know of but one that has come down to us, and that an English picture—the grievously injured one in Canterbury Cathedral at the head of the monument of Henry IV and Joan of Navarre.² Of wall-paintings again, solely depicting the murder, there still exist a great many, and perhaps the earliest in the series is one not in England but in Italy, in the church of SS. Giovanni e Paolo at Spoleto (pl. xxii, fig. 1). As this fresco is closely akin in style to the work of a master Alberto Sotio, who dated the crucifix in Spoleto Cathedral in 1187 or 1188, it is in all probability a work of the twelfth century. The fresco has been mutilated and is also in part covered up by later additions, but as far as can be made out it showed Henry II seated on the left, issuing his orders to the knights, the foremost of whom seizes by the hand St. Thomas, standing under a small edifice accompanied by Grim, and receiving the blow of the sword on his head. I am not acquainted with any other medieval wall-paintings of this scene in Italy,³ and with no existing one in France.⁴ In the Rhineland one might expect to find some, in view of

¹ For a reproduction of this see M. R. James, 'The Drawings of Matthew Paris', in the Walpole Society's fourteenth volume, 1926, pl. iii.

² Reproduced (in reconstruction) by J. Carter, *Specimens of Ancient Sculpture and Painting now remaining in England*, vol. i, 1786, pp. 56-7. Carter's original water-colour, and also one of the actual condition of the panel, are in the Victoria and Albert Museum.

³ It may be noted that the martyrdom of St. Thomas bears a considerable resemblance to the martyrdom of St. Magnus, as represented for instance in the fresco in the crypt in the cathedral of Anagni (reproduced by Toesca, *loc. cit.*, pl. vii, facing p. 160); and to the death of St. Matthew as depicted e. g. by Niccolò di Pietro Gerini in the church of San Francesco at Prato (see R. van Marle, *The Development of the Italian Schools of Painting*, vol. iii, 1924, fig. 350).

⁴ G. B. Cola (*op. cit.*, p. 145) notes the existence in the seventeenth century of a painting of the martyrdom in the church of St. Nicolas-aux-Fosses at Arras; but, as far as I can make out, the church in question no longer stands. The treasury of Arras Cathedral contains one of the blood-stained garments worn by St. Thomas Becket when he was slain.

the artistic and other relations between that part of Germany and England, but Professor Clemen, the foremost specialist on medieval painting in the Rhineland, tells me that not a single specimen of the scene exists there. Turning then to England, we find that definite records exist of wall-paintings, certainly or possibly, of the murder of Becket, either lost or extant, to a number of between twenty and thirty;¹ and naturally the number was vastly greater before 1538. Of existing examples, one of the finest, as well as earliest, is doubtless the painting in Bramley church, Hants (pl. xxii, fig. 3), which I am inclined to date about 1300. Later there comes the painting in South Burlingham church, Norfolk (pl. xxii, fig. 2), a frieze-like composition of singular effectiveness and monumental dignity;² and another very interesting example, showing a variation on the usual type, is the painting in Pickering church, Yorks. (pl. xxii, fig. 4), in which are represented the four knights waiting before attacking Becket, who is seen on the right, kneeling in prayer. Of still later examples known to us from reproductions, I may mention the one in the chapel of the Trinity at Stratford-on-Avon,³ which is an interior, carried out in the spirit of realism which we now, thanks to the rediscovery of the Eton wall-paintings, can associate with English wall-paintings of the late fifteenth century. In view of

¹ The following is a survey of the iconographical material bearing on the martyrdom alone supplied by English wall-paintings known to the present writer: Bramley, Hants (see pl. xxii, fig. 3); Burgh St. Peter, Norfolk, subject uncertain, destroyed (Keyser, *List*); Burlingham St. Edmund, Norfolk (see pl. xxii, fig. 2); Canterbury, Eastbridge Hospital (Keyser, *List*); Easton, Norfolk (Keyser, *List*); Eaton, Norfolk (Keyser, *List*, reproduced in *Norfolk Archaeology*, vi, plate facing p. 165); Faversham, Kent (Keyser, *List*); Hemblington, Norfolk, All Saints (communication from Miss Bardswell); Hingham Norfolk (Keyser, *List*), concealed; Lydiard Tregoze, Wilts. (C. E. Ponting in *The Wiltshire Archaeological and Natural History Magazine*, vol. xxvii, 1911-12, p. 441; now very much faded; the mitre of St. Thomas seen on the floor as at Burlingham and Eaton); Mentmore, Bucks. (Keyser, *List*), concealed; Merstham, Surrey (Keyser, *List*), subject uncertain, destroyed; Newington, South Oxon. (Keyser, *Arch. Journ.*, 1901, p. 54), subject uncertain; Pickering, Yorks., St. Peter's (see pl. xxii, fig. 4); Preston, Sussex (Keyser, *List*), reproduced *Archaeologia*, xxiii, pl. xxvi, destroyed; North Stoke, Oxon. (reproduced from a drawing by Prof. E. W. Tristram in Kendal, *Mural Paintings*, pl. xiv); Stone, Kent (thirteenth cent.) tolerably well preserved, drawing by Prof. Tristram at the church and V. and A. Museum; Stoneleigh, Warwick (Keyser, *List*); Stratford-on-Avon, Chapel of the Trinity, see below, n. 3, concealed; Sulhampstead Abbots, Berks. (Keyser, *Arch. Journ.*, 1896, p. 176); Wellow, Hants. (Keyser, *ibid.*, p. 172); Whaddon, Bucks. (Keyser, *List*); Winchester, St. John (Keyser, *List*; reproduced *Journal Brit. Arch. Ass.*, x, pl. 5; the only case known of a wall-painting showing the severed crown of St. Thomas's head falling to the ground); Winchester, Magdalen Hospital Chapel (Keyser, *List*), subject uncertain; Wootton Bassett, Wilts. (Keyser, *List*), destroyed; Yarmouth, Great, Norfolk, St. Nicholas (Keyser, *List*), subject uncertain.

² Both this wall-painting and the one at Bramley are reproduced from water-colours kindly made for me by Mr. H. C. Waite. Closely allied in type to the S. Burlingham painting is the one at Eaton (see above, n. 1).

³ Reproduced in *A Series of Antient . . . Paintings . . . on the Walls of the Chapel of the Trinity at Stratford-on-Avon*, 1836, pl. xiv.



Fig. 1. Enamelled Châsse. Limoges, thirteenth century
Sens Cathedral



Fig. 2. Enamelled Châsse. Limoges, thirteenth century
London, Society of Antiquaries



Fig. 3. Enamelled Châsse. Limoges, thirteenth century
Hereford Cathedral



Fig. 4. Enamelled Châsse. Limoges, thirteenth century
Trönö, Sweden

Published by the Society of Antiquaries of London, 1929



Fig. 1. Enamelled Châsse
Limoges, thirteenth century
Lyons Museum



Fig. 2. Enamelled Châsse
Limoges, thirteenth century
British Museum



Fig. 3. Enamelled Châsse
Limoges, thirteenth century
Paris, Musée de Cluny

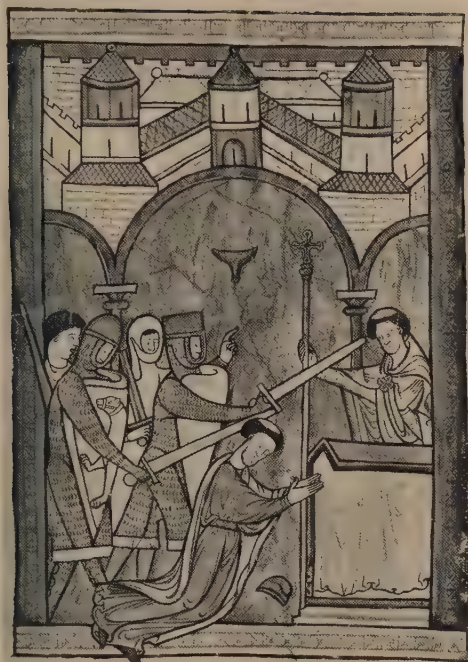


Fig. 1. Illumination
British Museum, Harl. 5102
English. 1190-1200



Fig. 2. Illumination
Carrow Psalter
English. c. 1233-50



Fig. 3. Illumination
British Museum, Add. 17012
Flemish. c. 1500



Fig. 4. Illumination
British Museum, King's 9
Flemish. c. 1500



Fig. 1. Fresco, SS. Giovanni e Paolo, Spoleto. Late twelfth century

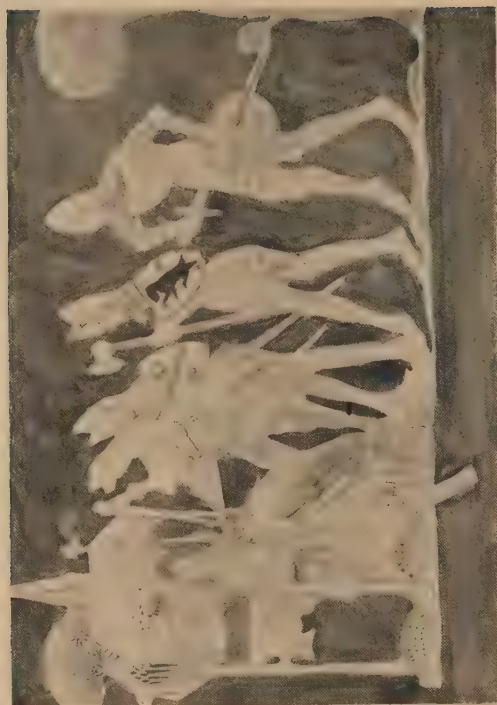


Fig. 2. Wall-painting, Burlingham St. Edmund. Fifteenth century

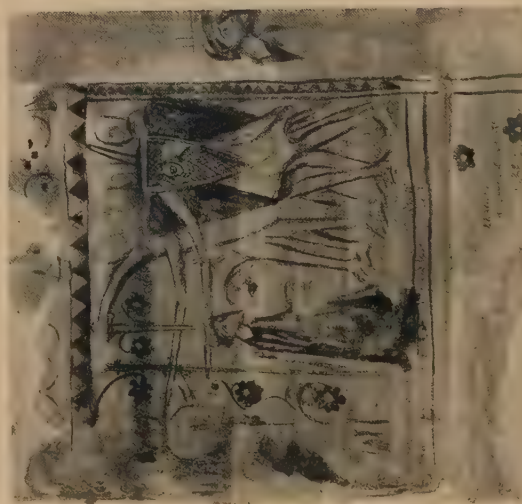


Fig. 3. Wall-painting, Bramley Church, Hants. c. 1300



Fig. 4. Wall-painting, Pickering Church, Yorks. Fifteenth century

recent activities at Stratford one may perhaps hope that this wall-painting may yet be recoverable.

In later painting the subject is not a very frequent one. The tradition of depicting it was, however, kept up by the English College at Rome; it occurs in the series of gruesome scenes of martyrdom, painted about 1582, in the College, by Niccolò Circignani (il Pomarancio), and now only known from engravings—a series of which Monsieur Emile Mâle has lately said, 'L'histoire de l'Angleterre y était racontée presque uniquement par des supplices'.¹ Later again, we find an anonymous Italian artist of about 1700 representing the scene in a picture, still belonging to the College at Rome: the composition has here taken on a character strongly reminding us of renderings of similar subjects by Murillo, say his martyrdom of St. Pedro Arbuez in the Hermitage. Thanks to its interest in English medieval history, fostered by the great French historians of the early nineteenth century, one would have imagined that the Romantic school in France would have taken to this subject with much zest; one feels it ought to have made a very congenial subject say to Paul Delaroche, but the nearest I have been able to get to him is a picture dated 1846, by one Camille Boucher, obviously an artist who felt the influence of Delaroche. The picture alluded to hangs in the ambulatory of Sens Cathedral.

From the account which has here been given—far from exhaustive as it admittedly is—it will, nevertheless, be seen to what an extent the imagination not only of England, but of the whole of Europe, was struck by the tragedy of St. Thomas Becket. Indeed, I think it may be said that it is the event in the twelfth century which stirred people's minds much in the same way as the humiliation and penance of Henry IV at Canossa did in the previous century: only the opportunities which the story of St. Thomas Becket offered for artistic treatment were immeasurably greater. One thing is certain: that it was through St. Thomas Becket that England made her principal contribution—and indeed a most important one—to the iconography of the Middle Ages, and, as we have seen, it is not a matter of hagiology pure and simple, but also of allied historical tradition and folklore surrounding the figure of the proud Norman, in whom the knight was but insufficiently merged in the archbishop, and whose whole personality comes out with such extraordinary

¹ See his article 'Le martyre dans l'art de la Contre-Réforme' in *Revue de Paris*, Feb. 15, 1929, p. 722. Mr. Francis Shutt, of the Venerable English College, Rome, to whom I am indebted for photographs of this picture and the one by Durante Alberti, also kindly informs me that there exist records of a picture of St. Thomas by George Freman (?) painted in 1654, and of another painted for the church of the College in 1675 by Henry Corner (?)—English names evidently, though nothing is known about these artists, who were probably amateurs.

54 THE ICONOGRAPHY OF ST. THOMAS OF CANTERBURY

vividness in the pages of the chroniclers. Hence the peculiar interest and fascination which must attach to a study of this vast and complex subject.¹

¹ An inquirer into a subject of iconography as complicated as that which concerns St. Thomas Becket inevitably places himself under a debt of gratitude in many quarters. In addition to the numerous kind helpers already mentioned, I should here also like to thank M. J. J. Marquet de Vasselot, Hon. F.S.A.; M. Ratouis de Limay; Dr. Philip Nelson, F.S.A.; Dr. W. L. Hildburgh, F.S.A.; Mr. S. C. Cockerell; Mr. Louis C. G. Clarke, F.S.A.; Professor Andreas Lindblom; Dr. Otto von Falke; Dr. Max Sauerlandt; Mr. J. A. Knowles, F.S.A.; Mr. A. F. Kendrick; Mr. Frank Simpson, F.S.A.; Professor A. Goldschmidt; Dr. G. Gronau; Herr Ludwig Stern; Professor Georg Pauli; Mr. H. W. Hull; Dr. Giuseppe Fiocco; Mr. Victor Perowne, F.S.A.; Mr. W. H. Woodward; and Dr. H. Bodmer.



Stained Glass Panel; English, fifteenth century.

IV.—*The Uranical Astrolabe and other Inventions of John Blagrave of Reading.*
By DR. R. T. GUNTHER, M.A.

Read 21st March 1929

THE object of the present communication is to bring together again three closely related items of antiquarian interest, which have got separated, and thus to recombine the parts of a long-forgotten scientific instrument of the Elizabethan Age, the invention of John Blagrave of Reading. Were any one of these three clues to be lost, it would be impossible to reconstruct his Uranical Astrolabe.

The inventor was a man of exceptional character and tastes, and the circumstances relating to his other inventions are also worthy of being recalled, for he obviously lived in and for serious scientific studies in an age when the economic need for such studies was becoming increasingly felt. And it is certainly of interest to note how a native of a small inland town, who in all probability may never have seen the sea, was inspired to devote his genius to the improvement of instruments to help navigators, gunners, and surveyors, and to raise the standard of time-keeping among his fellow countrymen.

John Blagrave came of a prominent Berkshire family which produced several men of mark in the sixteenth and seventeenth centuries. His father, also named John Blagrave, lived at Bullmarsh near Sonning; his mother was a daughter of Sir Anthony Hungerford of Down-Ampney in Gloucestershire. A manuscript note in a copy of his book, *The Mathematical Jewel*, which was formerly in the Old Ashmolean, sheds an entertaining light upon the family circle:

Here stands Mr. Gray master of this house
And his poore catt, playing with a mouse.

John Blagrave marryed this Graye's widdowe (she was a Hungerford), this John was symple; had yssue by this widdowe

1. Anthony who marryed Jane Borlass.
2. John, the author of this booke.
3. Alexander, the excellent chess player in England.

Anthony had Sir John Blagrave kt. who caused his teeth to be all drawne out, and after had a sett of ivory teeth sett in agayne.

The chief facts of our John's life have been collected by Anthony Wood,¹

¹ Wood, *Athenae Oxonienses*, ii. 96.

who believed him to have gone from Reading School to St. John's College in Oxford, though he did not take a degree there, and no record of his name is now discoverable in the college books. For many years he lived at Swallowfield near Reading.

In 1591 his father settled on him a lease of lands in Southcote for ninety-nine years, which he bequeathed to nephews and their descendants, of whom as many as eighty are said to have benefited. He died on 9th August 1611, and was buried in the same grave as his mother in the church of St. Laurence at Reading, where there is a half-length portrait-bust of him against the south wall. To Reading he left certain legacies, one of which provided the sum of 20 nobles a year to be competed for by three maidservants of good character and five years' service under one master. They were to appear on Good Friday before the Mayor and Aldermen in the Town Hall, and there to cast lots for the prize.

His tastes appear to have been wholly scientific. Of his own early training, he says:

'After I had no small time travell'd as far forth as my leisure would license me in most part of the Mathematicks, namely in Geometry, Arithmetick, prospective Cosmography, Topographie, Mensurations and such like, I think by the space of 8 years or more, and then at the last being drawne on by the study of Cosmography to the desire of Astronomy (which 2 cannot wel be in sunder) I thought it my best course about 6 years past, to crave the conference of one Thomas White, Vicar and Curate of Berkham, being 5 miles from Reading, of whom I heard very well of for his studie that way.

'I went to him and found him no less joyfull of my coming than I was careful of his acquaintance, but his studie way was altogether Astrology, Physick etc., where my desire was Astronomy, so that my hope of his help was almost on the sodaine frustrated; but there I found such choise of books for my purpose, that I repented not my coming, where *he* on the other side having heard greater speech, than was cause perhaps, of me and my practise in painting, drawing, graving and such like, would needs crave my help to make him a Catholicon Astrolabe and to that end he delivered me Sconer, Stophler, Roias, and Gemma Frisius books of their several Astrolabes: but above all other he commended unto me, as there was cause, Gemma Frisius.'

Farther on he continues:

'I perused them all. Sconer's devise was very stale and combersome. Stophler was artificial. Roias far inferior to Gemma. But both too combersome in my fancy that I could not well brooke them. In use uncertain for the slipping of any joynt or jogge.'

Blaggrave turned his reading to such good use that he came to be esteemed the flower of mathematicians of his Age. He was the author of three inventions, which he described in detail in three books. The first was: *The Mathematical Jewel*.

The Mathematical Jewel, shewing the making, and most excellent use of a singuler *Instrument* so called : in that it performeth with wonderfull dexteritie, whatsoeuer is to be done either by Quadrant, Ship, Circle, Cylinder, Ring, Dyall, Horoscope, Astrolabe, Sphere, Globe, or any such like heretofore devised : yea or by most Tables commonly extant : and that generally to all places from Pole to Pole.

The use of which Jewel is so abundant and ample that it leadeth any man practising thereon, the direct pathway (from the first steppe to the last) through the whole Artes of Astronomy, Cosmography, Geography, Topography, Navigation, Longitudes of Regions, Dyalling, Spherical Triangles, Setting figures, and briefly of whatsoeuer concerneth the Globe or Sphere : with great and incredible speede, plainnesse, facilitie and pleasure :

The most part newly founde out by the Author, Compiled and published for the furtherance, as well of Gentlemen and others desirous of speculative knowledge, and private practise : as also for the furnishing of such worthy mindes, Navigators and traueylers, that pretend long voyages or new discoueries : By *John Blagrove of Reading* Gentleman and well-willer to the Mathematickes, who hath cut all the prints or pictures of the whole worke with his owne hands. 1585.

Imprinted at London by Walter Venge, dwelling in Fleetelane ouer against the Maidenhead.



*Imprinted at London by Walter Venge, dwelling in
Fleetelane ouer against the Maiden head.*

Fig. I. ARMILLARY SPHERE ENGRAVED AND SIGNED BY BLAGRAVE.

From the Title page of the Mathematical Jewel, 1585.

The earlier or geometrical part of the work appears to have been founded upon the *Rudimenta Mathematica* of Sebastian Munster, printed at Basel in 1551, and this view is supported by the circumstantial evidence of a volume presented by John Aubrey to Ashmole's Science Museum at Oxford in which the books of Munster and Blagrave are bound up together. Blagrave dedicated this, his first work, to Lord Burleigh, taking the opportunity of drawing his Lordship's attention to those grievous troubles which he had recently experienced owing to 'the monstrous and detestable driftes and devises of those notorious, lewde and wicked practises against us, who fought *quaque injuria* to strippe us out of whatever we possessed, without any colour almost of matter or cause'. He had evidently been greatly injured, and, as he says elsewhere, for a period of six years, i.e. from 1577. The financial loss was estimated as 3,000*l*. That he cut his wood-blocks himself indicates that he was not affluent at the time, and he attributes the delay in the production of his book to 'those caterpillers of the commonwelth, those unconscionable hunters of mens titles, those wicked Hamons . . . who hindred my travailes, and brought me dayly out of course with my determinations'.

In the book the use of his instrument is extra-illustrated by occasional personal and local notes. He tells us, for instance, that while spending the Christmas holidays of 1579 with his uncle, Sir John Hungerford in Gloucestershire, there was a heavy fall of snow on 2nd January, and the lower region of the air became obscured by 'rimie thinne vapours . . . that much brake the force of the sunne beames', so much so that at two o'clock in the afternoon they were able to see the planet Venus, between the sun and the moon, and to measure her altitude with the Astrolabe. Again, in October 1580, while living at Bulmarsh, he observed the comet on several nights (9th, 10th, 12th, and 26th Nov.), a matter of great interest in those days.

In 1581 he added to his practical experience as a diallist by setting up a dial on the wall of Sonning Church on 26th July, 'to set the clock by', and about the same time laid out a large garden dial at Aldermaston for his very near kinsman Humphrey Forster. It was on a sloping bank of earth, and three yards square.

It is likely that ideas afterwards embodied in the Uranical Astrolabe were then in his mind, for in the conclusion to his book he declares himself 'sorrýe that my other 6 little bokes be not ready to go to the Press with these'. Had he produced them, he would have set the cart before the horse: 'Therefore considering I have kept a needful order in this my worke by passing from the lowest matters to the highest, the one to explaine the other, and that I have done my uttermost (as is well known) that my leysure would permit, I hope I shalbe the lesse blamed.'

Blagrove's Astrolabe or Mathematical Jewel consisted of four movable parts, Mater, Rete, Label, and Rule. He considered that its special merit lay in the dispensing with separate plates for special latitudes, such as those which were used in Chaucer's astrolabe, and in the substitution of a single plate which might serve generally 'through the whole world from pole to pole'. This base-plate or 'mater', embellished in his drawing with emblematic figures of Geometry with square and compass, Astronomy with cross-staff and armillary sphere, Navigation with cross-staff, and Cosmography with plummet and globe, was inscribed with a projection of the sphere covered with a net of meridians and parallels for every second degree. The equator, tropics, polar circles, and

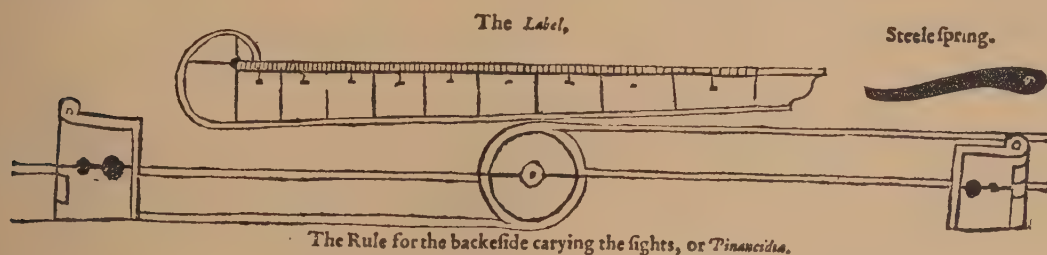


Fig. 2. LABEL AND RULE OF THE MATHEMATICAL JEWEL.

ecliptic were picked out by conspicuous lines. The border was divided into degrees numbered by tens to 360° , and also from 0° to 90° in each quadrant.

The Rete was similarly inscribed in its upper half, with the addition of some twenty-four stars, but in the lower semicircle stars only were represented 'linked together by small branches handsomely'. A graduated ecliptic band traversed both semicircles. When drawn on paper the rete was stiffened by being mounted upon a plate, preferably of thin metal, and all unmarked parts were removed with a file or penknife, but 'chisill you must not, nor strike with great pounches', lest distortion ensue.

The Label, graduated as in the figure, facilitated the reading of positions. An alidade or rule on the back, with two folding sights, served for the observation of celestial altitudes. When completed, the mater, rete, label, and alidade were fixed together by a small central rivet.

The manifold uses of the instrument are fully described in the third book of the *Mathematical Jewel*.

In the fourth book, Blagrove suggests that his readers should have not only little portable Jewels of metal, but also 'great Jewels of two foote diameter, if not of metall, yet made of a round boorde, couered with a fine paste boord'. whereon necessary lines may be distinguished with coloured inks 'very beautifully'. Arcs of great radius were to be drawn with a triangular instrument of

Astronomis nobilissimum, Geometris iucundissimum, Nauigantibus prestantissimum, Cosmographis commodissimum, Philosophis, Medicis, & a'iquid sublimè affectantibus gratissimum, Tyronibusq; facillimum.

Instrumentum

The handle is heere to be set on:

The

Meridies.
Noone.

Mater



Media nox.
North.

Per Ioannem Blagravum Readingensem, conditum, editum, & Sculptum.

1584.

Fig. 3. THE BASE-PLATE OR 'MATER' OF BLAGRAVE'S ASTROLABE.

The

*Zenith of the
Reete.*

Reete.



His Nadir

Fig. 4. THE RETE OF BLAGRAVE'S ASTROLABE.

Blagrave's own devising. It consisted of two straight rules AB and AC, jointed like a pair of compasses at A, and held open at a definite angle by a third rule EF, which could be clamped in any desired position.

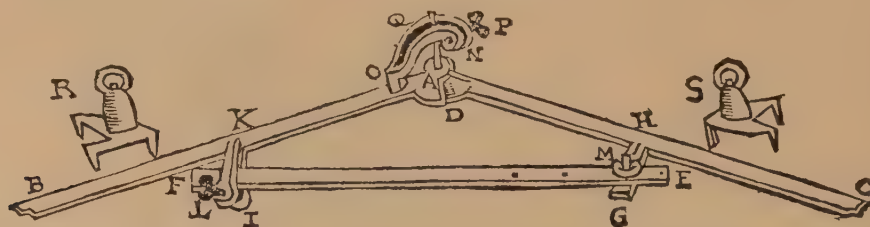


Fig. 5. BLAGRAVE'S 'INSTRUMENT OF THREE STREIGHT RULES, BETTER THAN ANY COMPASSES TO DESCRIBE ANY ARCH WITH BE HIS CENTER NEUER SO FARRE OFF'.

Mathematical Jewel, p. 65.

In use the rules AB and AC are traversed against two fixed dogs R and S, and the required arc is traced by a steel graver O, which is passed through a perforated rivet at A and is clamped there by the screw P.

THE FAMILIAR STAFFE

He did not, however, proceed right away, since five years later he interposed a new device, his *Baculum Familiare Catholicum* or Familiar Staffe, the circumstances of which are also worthy of being again recorded. In the summer of 1589 he was on a visit to his 'most honorable favorer' Sir Francis Knollys at Grays Court in Oxfordshire, when the arrival of the earl of Essex was expected. To do honour to the latter's return from the 'late desperate voyage' from Cadiz, Sir Francis arranged a competition in which his son and heir, Sir William Knollys, was to shoot at a mark with guns on the leads of the house—one of them, a saker, lately brought home from the winning of the Groyne in Spain. Blagrave was consulted as to the best method of getting the range of the mark certainly and speedily, 'as well for annoying of the enemy, as sparing of shots spent in waste'. 'So that I was', he wrote, 'in manner assured that no Treatise was like to be more acceptable unto his Honour (next unto books of sincere religion), than such as should tend towards the defence and safe keeping of this his native country.'

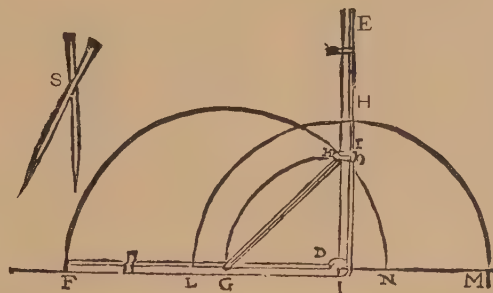
The result was the Familiar Staffe which is fully described and figured in a little book of that name published in 1590. Its manifold uses are therein set forth in thirty-two chapters and an appendix, of which, however, a fair summary is also given on the title-page.

From its primary and simple use as a range-finder, the author proceeds by a series of graduated exercises to chapter 32 to show 'how a Captaine may sett

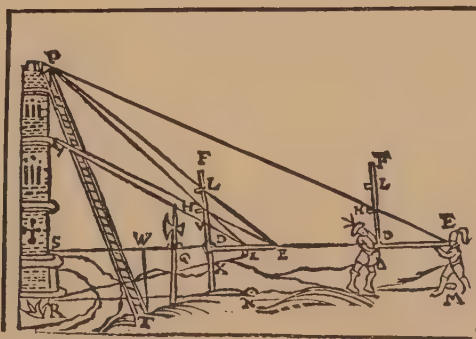
in platte or mappe any province of the enemies country'. And this is of special interest because it proves Blagrave's invention, like the topographical instrument of Leonard Digges, to have been primarily an instrument for the use of gunners, and secondarily an instrument of topographical importance, an



M, N, Sliding Bolts with Sighting pins which could be aligned with another pin at A.



DE, Running Staff, in which GH, the Graduator, divided into degrees, runs.
DF, the Hanging Side.
S, Trestle supports.



The use of the Familiar Staffe to get the height of a Tower speedily 'where you dare not come neere the base for daunger of shot or let by reason of some deepe mote or ditch', p. 22.

Fig. 6. BLAGRAVE'S FAMILIAR STAFFE, 1590.

association and sequence of which we are still reminded by the 'Ordnance' surveys of the present day. At the request of Sir George Carew, chief captain of the Isle of Wight, it was also adapted for use at sea.

The Familiar Staffe was made by 'a verie arteficiall workeman in Hosier lane, called John Reade'. No example is now extant, but a model has been made for exhibition in the Lewis Evans Collection at Oxford.

THE URANICAL ASTROLABE

In the meantime, no doubt partly owing to his father's death, his circumstances appear to have improved, so that six years later, after the publication of the Staffe, he was able to engage the services of the skilful engraver Benjamin Wright, and to produce the Uranical Astrolabe. In designing this instrument Blagrave was determined to break with past tradition and embody the latest teaching of modern science. He determined to show the earth turning below a fixed sky, instead of a firmament turning round a fixed earth.

'Old Stophlerus', he wrote, 'and our old English Laureat, G. Chaucer, according to the auncient astronomers, appointed the Starry Heavens to move rightwards from East towards West, upon the Earth or fixed Horizon of the place. And I according to Copernicus cause the Earth or Horizon to move leftwards from West towards East, upon the starry Firmament fixed.

'In so much that if in this my Astrolabe you hold still that particular mover with one hand, and with your under hand turn about the Celestial, then is it iumpe Stophler again. In which motion (a pretty thing to note) one that standeth by shall hardly perceive any other but that the Rete moveth, although indeed you turn about the mater, strongly confirming Copernicus' argument, who sayth that the weakness of our senses do imagine the Heavens to move about every 24 hours from East to West by a Primum mobile, whereas indeed they have been always fixed, and it is the earth that whirleth about every 24 hours from West to East, of his own proper nature allotted unto him.'

It is doubtful whether any complete example of the Uranical Astrolabe is now in existence, because the separate parts of which it was composed are rarities which are keenly sought after by different categories of collectors. Even in the British Museum its parts are stored in separate departments, estranged from the book which supplies the only clue to their use in combination.

First, there is John Blagrave's book entitled *Astrolabium Uranicum Generale*, printed in 1596 as his third work. Although he describes this astrolabe as 'a necessary and pleasaunt solace and recreation for Navigators in their long Journeying', his thirty-two chapters thereon are incomprehensible without the instrument, and so have escaped the attention they deserve. The book is very rare, and though there are two copies in the Bodleian and one in the British Museum, neither catalogue has any cross-reference to an instrument.

Secondly, A Map of the World, designed by John Blagrave but engraved by Benjamin Wright in 1596, has been recently published in facsimile by the Trustees of the British Museum in their atlas of Six Old Maps, printed in 1928. Attention has been drawn to the ingeniously strained projection by which the continents of Africa and South America, and the southern lands of the Indian Sea have been worked into the corners of a polar chart of the northern hemi-



THE ZENITFER AND CELESTIAL OF BLAGRAVE'S URANICAL ASTROLABE, 1596

Published by the Society of Antiquaries of London, 1929

sphere, but no description has been given of a very remarkable diagonal scale which is engraved upon the side of the same plate. This is the Zenitfer. It has no connexion with the map of the World, but is the second essential part of the Uranical Astrolabe.

It was while I was studying a print of this scale bound in the Ashmolean Manuscript no. 417, that I found the third part of John Blaggrave's instrument, his original Celestial, a wonderful piece of craftsmanship, well executed and signed by the engraver. It is a circular planisphere showing all the northern, and certain of the southern, constellations engraved on a plate measuring $10\frac{1}{10} \times 10\frac{1}{8}$ in. In the corners are calendars and horary tables, with winged heads of the winds decorating the spandrels. In the lower angle is the title

ASTROLABIVM VRANICVM Generale *Celum hab[e]ns stellatū fixū terram-que siue horizontem in 24 horarum spacio continuo circumvolventem cum omnibus supplement[i]s ad artem judicandi necessariis.* PER IOANNEM BLAGRAVVM generosum Readingensem mathesibus benevolentem.

Beniamini Wright Anglus Londinensis coelator.

ANNO DOMINI 1596.

This engraving is thus the earliest known work by Benjamin Wright, who was also engaged upon a plate of *The Armes of all the chiefe Corporations of England* which he 'soulde at the harts horne in pater-noster rowe' in London. His representations of the constellations are quite remarkable and show a great advance on the crude work of Augustin Ryther dated six years earlier. Sir Sidney Colvin¹ has followed up Wright's later career between 1602 and 1620 on the Continent, where he engraved many maps for J. Langeren and J. I. Pontanus in Amsterdam, and for the Italian atlas of Maginus.

The date upon the Blaggrave engravings is 1596, and there was no ground for attributing them to any more recent period, until Mr. E. Heawood, the librarian of the Royal Geographical Society, who has made a special study of water-marks, informed me that the Blaggrave map in the British Museum is printed upon paper marked with a fool's cap as commonly used from about 1650-80. A re-examination of the Ashmolean prints has reassured me of their antiquity, for both the Terrestrial and Astronomical maps show the same water-mark, a simple fleur-de-lis on a shield surmounted by a crown, and from the point of the shield are suspended the letters W.R. Marks of a similar type are referred by Briquet, *Les Filigranes*, to the period 1585-90, when they were used by the maker, W. Riehel of Strasbourg.

¹ *Early Engraving in England*, 1905, pp. 31-3.

The arms and motto *Virtus Invicta*, of Charles Lord Howard of Effingham, to whom the work is dedicated, occupy one-third of the uppermost corner. Next to the coat of arms is a triangular scale of hours, an *Horarium Planetarium* devised by Blagrave in triangular form 'never seen before'. This scale was completed by the addition of a small label, graduated with the six planetary hours, which was pivoted at the centre. A sketch for this label is engraved near the Zenitfer on the Terrestrial map. The use of the little instrument is explained in chapter 29 of the book: the label had to be set to the hour of sunrise upon an arc, graduated for hours from sunrise to sunset, *Hore ortus et occasus*, numbered 1-10 and divided into thirds. From each division proceed lines drawn parallel to the base, which intersect a straight scale of common or equal hours, *hore diei ac noctis*, numbered in both directions 3 to 12, and 1 to 9.

The corner with the inscription also contains a semicircular Domineering Table, giving the symbols of the planets which rule each planetary hour of each day and night. For instance, if the day be Thursday, or the 5th day of the week, Sunday being the first, seek 5 in the scale marked *Noctes*: then below the 9th planetary hour is the sign ♄, showing that 'Saturn beareth dominion'. The other two corners are occupied by Precession Tables, the *TABVLA PERPETVA RADICALIS AEQVALIVM MOTVVM CELESTVM*. Blagrave knew that the places of the fixed stars were being altered at the rate of one degree in every 67 years, by reason of the *Aequalis motus precessionis*. His tables show how much this amounts to in periods of 1 day, 1 year, 4, 20, 100, and 1,000 years.

But he also knew that the precessional movement was not quite uniform. As he puts it, 'skilful artes-men have found a certain librament or ballaicing of the Equinoctial and Poles which sometimes helps forward the equal motions, at another pulleth it back, even up to 71 minutes or 1° 11', by which the equal motion becomes unequal'. So he added a second part to his table to show how much is to be subtracted or added, or as he termed it *Aequationes Octavae Sphaerae Ablativae* and *Aequationes Octavae Sphaerae Adjectivae*, computed up to the year A.D. 3440.

But the chief interest centres in the treatment of the Celestial Planisphere. It is a stereographic projection of the stars which are visible in the northern hemisphere. In the centre is the North Pole with the Pole Star correctly set at a little distance from the Pole. With the Pole as centre there have been drawn the equatorial circle and the limiting circle divided into 360° starting from the first point of Aries. These, with a scale of degrees of altitude numbered from 0° at the Equator to 90° at the Pole and to 30° south of the Equator, are the only lines relating to the daily rotation of the Earth, all other measures being made by the application of a special revolving rule, the Zenitfer.

The net of co-ordinate lines is composed of eccentric circles, the projec-

tions of the ecliptic and of circles parallel to it, drawn for every fifth degree up to the pole of the zodiac and for varying distances to the south of the zodiac. These are crossed by azimuthal circles passing through the zodiac pole and every fifth degree of the zodiac. Every sixth azimuth delimits a sign of the zodiac, and is twilled, and the space within it is shaded with waves, flames, dots, or is left white in accordance with the attribute of the sign, whether Watery, Fiery, Earthy, or Airy.

The ecliptic is divided into 360° , or 30 degrees to each sign, each of which is marked in accordance with a scheme, the *Directoria zodiaci*, by means of which the *gradus masculini* can be readily distinguished from the *gradus feminini*, and the qualities of the days predicted: the possibilities being *tenebrosi*, *vacui*, *lucidi*, *fumosi*, *debilitantes*, *Fortunam augentes*, *puteales*.

Stellar magnitudes are distinguished by seven graduated star symbols. It is unfortunate that the projection does not admit of the constellations being all drawn to a uniform scale, those nearer the pole being much more cramped for space than those farther south, even in the zodiac. To north and south of the zodiac are inscribed *Facies Planetarium* and *Termini Planetarium*. A planetary symbol is set to each fifth degree, doubtless in illustration of Claude Dariot's book on Judicial Astrology,¹ which Blagrove mentions as 'by good hap now newly imprinted in English'. Notes of the planetary significance of the twelve Signs are inscribed round the outer circle, and the precessional movement of the northern and southern stars among the constellations is recorded in two inscriptions: 'Stelle meridionales ad annum domini 1570 quibus addendo gradū 1 mi. 30, anno 1652 convenient.' 'Stelle septentrionales ad annum 1652 in quo anno metus veri et equales fixarum convenient quibus detrahendo gradus 1 mi. 30 anno 1570 respondebunt.'

Finally, as an object of special interest, a large comet is represented near the hind legs of the Great Bear, and thus the map was brought quite up to date by the insertion of Blagrove's own observation. My friend Professor H. H. Turner informs me that this was the comet of July 11, 1596, discovered by Tycho Brahe and by Moestlin. It was visible for five weeks.

So far this planisphere would be nothing more than what it has hitherto been recognized as, namely, a map of the heavens marked for use as an astrological diagram. That it might be used as an instrument, Blagrove fitted it with a moving rule, one inch in width, pivoted at the centre and stretching diametrically across the planisphere. This attachment was his own invention. He called it a Zenitfer. The Zenitfer was provided with a Cursor, to which a further part, the Almicantifer with a Pointer, could be added. This furniture, he tells us, is best made of metal. All parts were delineated by the side of the

¹ A Latin edition was printed at Lyons in 1557.

terrestrial map, and a pattern was on view at the house of Mr. Matts, the bookseller dwelling at the sign of the Plough over against St. Dunstan's Church in Fleet St., 'who shall easily at all times send any lettre or notice weekly unto me by our Carryer's'. If the Almicantifer be not to hand, a thread and pearl would serve, for the pearl shall supply the steed of the pointer, and instead of a 'ledge of brass', a breadth of 'lantern horn' might be used. The scales on the Zenitfer are so elaborate, and the description of them so involved, that I doubt whether any one would ever have been able to reconstruct them, if it had not been for the original engravings on the border of the map of the Earth.

At the centre is a Circle of 24 hours with the opposite 12 o'clock points joined by the fiducial edge of the rule, the ends of which are marked *Meridies* and *Media nox*.

The Almicantifer roots are numbered on the outer side of the Zenitfer from their extreme points inwards towards their said Zenith points, ending with them with 90.

On a scale along the fiducial line are 'planted the radial degrees of the projectement on both sides of the scale, because they require double numbering for sundry purposes'.

a. The Radial degrees which bond on the fiducial line are numbered from the equinoctial (marked by a small cross) both ways, viz. towards *Meridies* as far as the Zenitfer will give leave, which are about '36' (in text, but apparently only 28 on the instrument), and towards the centre ending there at 90. These serve to descry the declination of the fixed stars and planets, but chiefly for the 90 zeniths which appertain to the 90 *general Horizons*, and for distinction's sake, 'I call them the 90 *Vertical Points*'; and they correspond exactly with the 90 lower ends of the 90 *Zenith lines*, which Blagrave called the 90 *Zenith Points*. So that when the *Cursor* is moved its fiducial line cuts both the Vertical Point and the Zenith Point of any latitude at the same time.

b. Towards *Media Nox* the Radial degrees are numbered from zero at the centre to 90° at the equinoctial. These graduations serve for the 90 intersections of the 90 general Horizons with the North Line, and 'therefore I call them the 90 *Horizontal Points*'.

c. The Radial degrees on the inner side of the northern half of the scale serve to find the 12 Houres. They are intended to be numbered in the reverse direction 0°-90°, but 'L, LX, LXX, LXXX' only are marked.

d. Similarly along the southern half, the Radial degrees are numbered in pairs, from the centre to *Meridies*, X, XX, XXX, XL, L, so that the XLV division coincides with 90° on the equinoctial line. These divisions 'I call *Domifieving roots*'.

The Scale of 'slope lines' or *Domifieving Scale* is a help to get 8 of the 12

‘houres in that latitude whose number it showeth’, by a method described in chapter 27 of the book. In the text the numbers are described as beginning with 60 and ending at the centre with 90. In the figure the numbers begin with 60 and end with 0 at the centre. Degrees numbered L to LXXX are used in connexion with this scale.

The Cursor. The fiducial line of the ‘Cursor always runneth’ square to the fiducial line of the Zenitfer. On to it is jointed the Almicantifer—a plain label or ‘loose scale’ without graduation, but having sliding upon it a small index, the Pointer.

Blagrove also gives directions for adapting this general instrument for use in a particular latitude by the addition of a rete or mover with a circle of hours and a Horizon Circle constructed in accordance with the method of Stoeffler with the Arcs of the 12 hours. The sliding pointer is not essential, since the Almicantifer may be graduated with the particular degrees of altitude for a given latitude, ‘all which shall better appeare by such Astrolabes as I meane to set abroad ready furnished’.

‘And to the end that every man may see how it ought to be made in metal, I have caused a rude pattern of each furniture in metal to remain with the said Mr. Matts. Notwithstanding, for such as will not go to that little charge, I have upon better advisement caused the Zenitfer and Cursor to be imprinted with the Astrolabe, to be set either on past-boord or cuttler’s scale to serve the turn.’

The places of the Planets were to be found with the help of Planetary Tables aided by a small circular attachment fixed to the mater with four or eight rivets. But as there is no drawing of such an addition, we cannot be sure of its application. Blagrove also intended to fix an Organon Vranicum or Calendar of the Year to the back of the instrument, but evidently it never materialized, for he recommended the use of a scale of Months indicated by initial letters placed outside the ecliptic.

For the measurement of altitudes the instrument was suspended perpendicularly and sights were taken through the two vanes of an ordinary centrally pivoted alidade.

Occasionally Blagrove’s similes are strikingly picturesque. He had evidently found some difficulty in making some one understand exactly what a stereographic projection of a sphere is. His exposition was as follows:—

‘Even as a lofe of dowe or paste, after it is new moulden round and Copped, if you then put it into a presse, will become a flatte-cake: Even such a cake made of the round Spheare or Globe pressed, is the Celestiall of our new Astrolabe, which I would have you now for this purpose imagine to be a lofe or round Globe againe: and that every of his circles had their due convexities in such sort, that a little pretty fellow like Tom Thumbe might easily seat himselfe under them as under a Canopy in the very centre of the concavity.’

There were occasions when he believed that his instrument might serve for forecasting the weather.

'For example, this yeare 1596 some 5 or 6 dayes together before the end of September after long sitting all day writing this present booke, I was in the evenings hindred of my recreating walks by sodaine rising of the winde with showres of raine, though the daies were reasonable faire. I therefore sought my new Astrolabe . . .

'Also the 2 of October 1596 I was sodeinly overtaken riding from Reading to my poore house at Swallowfield at even, with a most stormy rayne that continued a hour or two aften very extreame, it made me looke at my Astrolabe againe, where I found . . .'

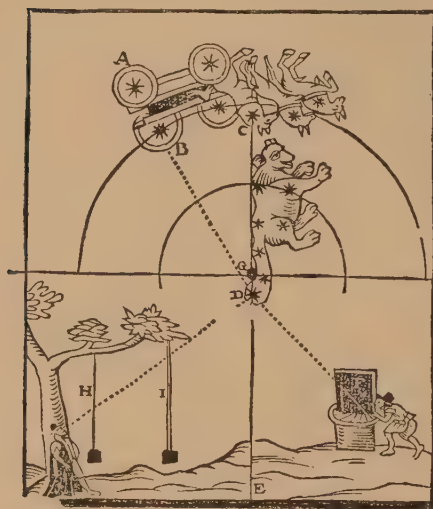


Fig. 7. BLAGRAVE'S METHOD OF DRAWING THE MERIDIAN LINE IN THE NIGHT BY THE POLE STAR.

Art of Dyalling, 1609, p. 73.

Blagrave then narrates how the stars in their courses presaged such weather. But he then with very commendable caution admits

'I dare presume no further least I should be billed amongst the common liers, as others are, happily causeless' (chapter 26).

Blagrave was evidently convinced that his invention would prove to be a 'best seller', for he addressed his gentle readers in the following terms:—

'The ears of my conceit being continually troubled with such a noise and clamour for my Uranical Astrolabe, so long and largely promised, as greedy auditors are won't to make at a Stage play: calling "Come away now", with boys throwing volleys of stones rattling at the gates of my otherwise busy employments, maketh me here in haste (God grant to your liking) to come up the Stage with this rare piece of Mathematic, to stay your languishing expectations, and sufficient to entertain the time until Midsummer when the stately Comedy of Queen Uranya her pageants shall offer themselves to your pleasant view. Solace yourselves I pray you here-with, and be bold with me if in anything you doubt. You shall have me, God willing, once every term in London reading to your wish at a poor lodging within Maister Green's Wharf near unto Ch. ✕, and at Master Jacksons at the sign of the Swan in S. Paul's Churchyard or at Mr. W. Matt's, Stationer at the sign of the Plough, who hath the impression of this book, you shall ever know whether I be at any time in the City: with whom I have taken order to furnish with these instruments and their supplements any that shall want them.'

THE ART OF DYALLING

His last book was on *The Art of Dyalling* dedicated to Sir Thomas Parry, chancellor of the Duchy of Lancaster, in grateful remembrance of his father

having lent Blagrove 'in his infantry such mathematicke books, as in those daies were hardly, or not else where to be gotten'. The work was in two parts.

'The first shewing plainly, and in a manner mechanically to make dyals to all plaines, either Horizontall, Murall, declining, reclining or inclining with the *Theoricke of the Arte*. The second how to performe the selfe same, in a more artificiall kinde, and without use of Arithmeticke, together with concave and convex Dyals, and the inserting of the 12 signes and the howres of any other country in any diall, with many other things to the same Art appertaining. The whole differing much from all that hath beene heretofore written of the same Art by any other, and the greater part wrought by diuerse new conceits of the Author, never yet extant, now published By Iohn Blagrove of Reading gentleman and Mathematician this yeare, 1609.'

The numerous diagrams which illustrate the book are more neatly executed than those in the chapters on Dialling in the *Mathematical Jewel*, and there are many local references to Reading. Blagrove notes that on or about 2nd August 1604 he pulled a dial down 'from S. Laurence Church in Reading, which had there stood time out of mind, that went $\frac{3}{4}$ of an hour false'. This error he attributed to the ignorant use by the original diallist of a magnetic needle 'which commonly varieth 11 or 12 degrees from the true North' and has 'caused in times past many false dyals to be made'.

But it is for his *Mathematical Jewel* and his charity that John Blagrove is chiefly remembered, and even in 1658 in a catalogue of books and instruments made and sold by Joseph Moxon at his shop on Cornhill at the Signe of Atlas, customers could obtain 'The Catholick Planisphere, call'd Blagrove's Mathematical Jewel; made very exactly on Past-Boards; about 17 inches Diameter'. In the same year his instrument was again published by Mr. J. Palmer, M.A., in a small volume on the title-page of which the author's good angel is broadcasting with two trumpets the fame of Blagrove, whose portrait is engraved in the left upper corner.

The inscription below his monument¹ at Reading is a reminder of his charity:

¹ A sepia drawing of the monument, inscribed 'copied from his Monument at Reading by Mr. Ashmole' is inserted in the copy of 'The Mathematical Jewel' in the Lewis Evans Collection at Oxford. This copy contains the signatures of Daniell Bentyt, John Edwards 1679, Lewis Evans, F.S.A., and the book-plates of Wm. Simonds Higgs, F.S.A., 1819, and John Richards, junr., F.S.A.



Fig. 8. DIALLIST NOTING 'THE SCITUATION OF A WALL TO FINDE HOW MUCH HE DECLINETH'.

The Building represented may have been Blagrove's own house.

Mathematical Jewel, p. 101.

JOHANNES BLAGRAVIUS TOTUS MATHEMATICUS,
 CUM MATRE SEPULTUS OBIIT
 9 AUG. 1611.

Here lies his corps, which living had a spirit,
 Wherein much worthy knowledge did inherit
 By which, with zeal, one God he did adore,
 Left for maid-servants, and to feed the poor ;
 His virtuous Mother came of worthy race,
 A Hungerford, and buried near this place,
 When God sent death their lives away to call,
 They liv'd belov'd, and died bewail'd by all.

Two of his poems are still extant: of himself he wrote

Where gathered he his skill? What tutor tolde him in?
 The Vniversities denill That ere he dwelt therein
 And London laughes to thinke She scarce doth knowe hys face,
 How comes he then to linke With *Uranes* worthy grace?
 My answeare shall be short, My paine this peece hath pend
 God lent it to my lot, And hee shall me defende.
 The Psalmes say sucklinges young His glory shall disclose
 Which warrants me among My wrangling wrabbish foes.

I. B.



LONDINI Sumptibus Josephi Moxon.

Fig. 9. ENGRAVED TITLE TO J. PALMER'S MATHEMATICAL JEWEL, 1658,
 with portraits of Blagrave and Palmer.

V.—*Roof Bosses in the Nave of Tewkesbury Abbey.*
By C. J. P. CAVE, Esq., M.A., F.S.A.

Read 17th January 1929

THE roof of the nave of Tewkesbury Abbey belongs to the first half of the fourteenth century; the bosses are carved in stone. Those down the central rib represent scenes from the life of Christ; those on the sides are angels, some with censers, some with musical instruments, and some, at the east end, with instruments of the Passion; there are also the four evangelistic symbols. For purposes of reference I have numbered the central line of bosses from the west end C 1, C 2, etc.; those at the side are numbered from the east end, on the north side N 1, N 2, etc., and similarly on the south side. I have numbered them thus as the central bosses obviously begin with the Nativity at the west end, while the side series have the most important figures at the east end.

The roof was cleaned and painted by Gambier Parry about 1878; at the same time a slight amount of restoration and gilding was done on the bosses; it was also at this time that casts were made of a number of the principal bosses, and these are now preserved in the abbey library, where there is a note-book with various notes, newspaper cuttings, etc., concerning the abbey. Amongst the notes are three descriptions of the bosses; they are evidently copies of lists, the originals of which I have not been able to find. The first is by J. D. Thomas Niblett, on the centre bosses of the nave; a note in pencil gives as the date 17th June 1878. These notes as far as they go are very puzzling, and it is not quite clear whether they were made when scaffolding allowed a near approach, or whether Niblett had only examined the bosses from the floor. My own impression is that he had not seen any of the bosses except from the floor, for he makes various mistakes that would be inexplicable had he obtained a nearer view; for instance, in the Adoration of the Magi, he says that none of the figures is crowned, whereas two of them wear crowns; of the most easterly boss which he calls 'our Lord in Majesty' he mentions that the hands show the stigmata: there is no trace of such now.

Another set of notes on the same bosses is by H. Paget Moore; he made these notes after Gambier Parry's work had been done, and makes one or two curious mistakes which will be noticed later.

More important than the above is a partial copy of 'Mr. Gambier Parry's notes on the state of the bosses in the nave'. I have tried in vain to find the

original report. Mr. C. M. Oldrid Scott, whose father was the architect under whom the restoration was carried out in 1877-9, does not know of the existence of such a report; he referred me to Messrs. Burlinson & Grylls, the firm who had much of the actual work in hand. Mr. Grylls informs me that they have now no papers referring to the Tewkesbury restoration.

Finally Mr. Gambier Parry's son, Major E. Gambier Parry, has written to me on the subject, but he has no copy of the report. He gives, however, some interesting details of the work at Tewkesbury. Of his father's work he says: 'I was familiar with all his fresco painting work from the first Ely days, when I often stood model for him for legs and arms and hands, etc., till the time of his death, when he was completing part (a further part) of his work in St. Andrew's chapel, Gloucester cathedral. Of course I have a very clear recollection of the time when he was engaged upon Tewkesbury Abbey, and he frequently talked to me about it, and especially of the roof bosses. He said he found these, as also the adjoining members, "coated with endless coats of white-wash, so much so as to obliterate entirely their beautiful forms and designs—that is, all possibility of their being seen from the floor of the nave". He therefore set to work to have them carefully scraped, and I recall his delight at the beautiful things he found. Having cleaned them in this way, he filled in the *backs* in colour, and then used gold to accentuate the parts, so that each subject declared itself and could be seen.'

The only copy, then, of Gambier Parry's report appears to be the one contained in the note-book in the abbey library, and that is avowedly incomplete, and deals only with the five western bays. It must, I think, have been written before any scaffolding had been erected and before the whitewash had been removed, when the detail was not easy to make out from the floor of the nave, for the boss representing the Finding in the Temple is described as 'our Lord on a pedestal before the chief of the Doctors; the biretta of the latter is smashed.' This would be a very likely interpretation before the work was begun and the bosses cleaned. There are also various notes of damage to some of the bosses, especially to the wings of angels, but in view of the above and without knowing exactly when the notes were made it is difficult to reconstruct the condition of the bosses before the work of restoration began. There is, however, a definite statement in Niblett's notes that in the boss of the Nativity the top of the head of St. Joseph was missing, the beard and chin alone remaining; and that above the figure of the Virgin are the remains of a sitting figure, the upper part above the knees being lost. A note in pencil states that the head of St. Joseph was restored in the week ending 18th May 1878. Also in Gambier Parry's notes it is stated that on the boss of the Crucifixion wet

plaster repairs were done, and that there was evidence of old colour; also that the cross must have been shown by colour, as it is not carved, and Paget Moore states that Gambier Parry put in the cross, apparently in colour.

As to the general work of restoration on the roof we find in the *Tewkesbury Register* for 10th March 1877 an account of a meeting at Lambeth Palace at which it was stated that 'the partial colouring and gilding on the vaults of the choir have been restored to their original state, as have also the beautiful artistic and historical bosses in the tower, the transepts and the two bays of the nave which have been taken in hand with the choir'. There was a further meeting at Lambeth Palace which was reported in the *Tewkesbury Register* of 5th April 1879; at this meeting Mr. Oldrid Scott stated that

'The whole of the nave has been cleared of modern whitewash which disfigured it, and all defects in the stonework have been made good. This refers to the interior. What is of special interest here is the treatment of the vaulted ceiling. . . . The bosses of the groining when first uncovered showed signs, though not very distinctly, of their ancient coloration, and it was at the time determined to restore them. The result, however, was unsuccessful, and the treatment was stopped after two bays had been so dealt with. . . . It quickly appeared that any treatment of [the bosses] in full colour tended only to obscure their design, and to emphasize their incompleteness. So much was this felt that for a considerable time it was the opinion of Mr. Gambier Parry, who had given the matter much consideration—as it was my own—that it would be best to attempt no decoration whatever. The greater part of the ceiling was therefore left plain, but the effect from below was by no means satisfactory, and at length Mr. Parry proposed a method of treatment which he has now carried out in a portion of the groining . . . it has now been decided that the treatment shall be continued throughout the whole of the nave.'

Mr. Gambier Parry followed and said that

'if it was desired that he should speak about the decoration he was carrying out on the roof of the nave, he must say that the roof was a marvellous specimen of English carving. . . . The details of the roof of Tewkesbury must not be looked into, but taken as a whole it exhibited a vigour of conception and charm of inspiration which quite atoned for its fault, but the series of grand skeletons was very imperfect. It was as if the carver had chipped away from the stone just as the spirit moved him, until he got round the corner, when he found there was no room to complete the work. The figures were left in a very imperfect state, for the painter or decorator to fill in, but they were strong and vigorous. . . . One of the most remarkable bosses is that of the Crucifixion, for it is a crucifixion without a cross, but he had taken the liberty to put in a cross in gold below the Crucified One. . . . If they inspected the colouring of the roof they had few records from which to judge. He was of opinion that it was extremely coarse.'

I have gone into these details to try to determine, rather unsuccessfully I

fear, the state of the bosses prior to the restoration, and to put on record what was done to them at that time.

It appears that the roof of the nave as we actually see it to-day belongs to the first half of the fourteenth century, and the bosses may be considered to belong to this period. It will perhaps be convenient to deal first with the side bosses which represent angels. Ten of these carry censers, sixteen musical instruments, and four of them passion emblems; in addition there are the four evangelistic symbols, making thirty-four figure bosses.

The censuring angels (pl. xxiv, figs. 1 and 2) are, with two exceptions, represented kneeling on one knee; they are in long plain robes, with a girdle round the waist, and with wide collars fitting closely round the neck, except in two cases where the collar is lower, leaving the shoulders bare; the sleeves are narrow and fit quite close at the wrist. The feet are bare; the wings are extended and are visible on each side of the figures; the hair is fairly long, reaching half-way to the shoulders, and it sometimes appears to be plaited at the sides. The actual censers are plain hemispherical bowls to which several cords are attached; these are brought together at the top and are held by a round piece of wood or metal; and this in some cases has a ring attached to it. Two of the angels are standing instead of kneeling.

The angels bearing musical instruments are represented in similar costume, but several of them wear in addition cloaks which cover the upper part of the arm; in the case of one of the harp-players this cloak is thrown back over the right wing, to leave the arm free. Some of the angels are standing, others are seated on what appear to represent stone benches; in one case the bench is draped.

Stringed instruments:

Harps, N 2 a (pl. xxiv, fig. 3); small harp of the Celtic type, with curved fore-pillar, and almost straight sound-board. The drapery round the base of this, and the other two harps, probably represents the bag in which the harp would be carried, slipped down to be out of the way when the instrument is being played. There are five strings. N 14 (pl. xxiv, fig. 4); a rather larger harp of similar type, but with eight strings, and seven or perhaps eight tuning-pegs. This angel is the one who has the cloak draped over the right wing. S 11 (pl. xxiv, fig. 5); this harp is very similar to the above, but it has ten strings and tuning-pegs, the strings radiate somewhat, instead of running parallel, and the sound-board is more definitely curved. Part of the fore-pillar is broken.

Citole, N 9 (pl. xxiv, fig. 6); the instrument is held horizontally and is played with a plectrum; the body and neck are not differentiated, as was the case with later examples of this instrument; there are three strings which



Fig. 1. Censing angel



Fig. 2. Censing angel



Fig. 3. Harp



Fig. 4. Harp



Fig. 5. Harp



Fig. 6. Citole



Fig. 7. Gittern



Fig. 8. Gittern



Fig. 9. Guitar fiddle



Fig. 1. Symphony



Fig. 2. Psalterium



Fig. 3. Portative organ



Fig. 4. Bagpipe



Fig. 5. Shawm



Fig. 6. Pipe and Tabor



Fig. 7. Tabor



Fig. 8. Timbrel



Fig. 9. Cymbals



Fig. 1. Passion angel



Fig. 2. Passion angel



Fig. 3. Passion angel



Fig. 4. Passion angel



Fig. 5. St. John



Fig. 6. St. Matthew



Fig. 7. St. Mark



Fig. 8. St. Luke

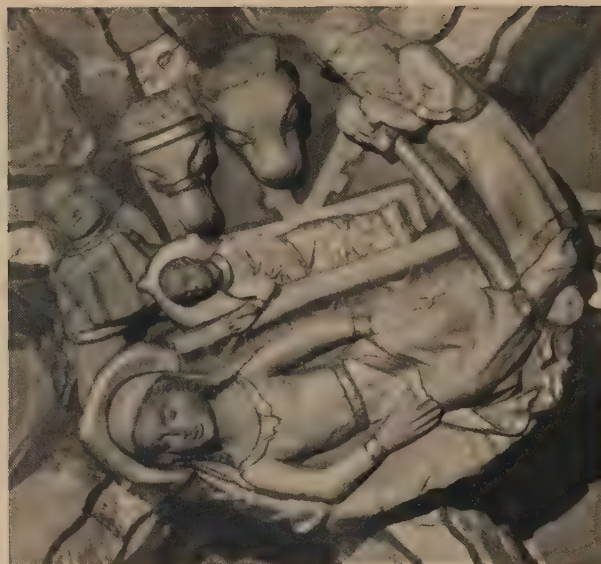


Fig. 1. The Nativity



Fig. 2. The Circumcision (?)

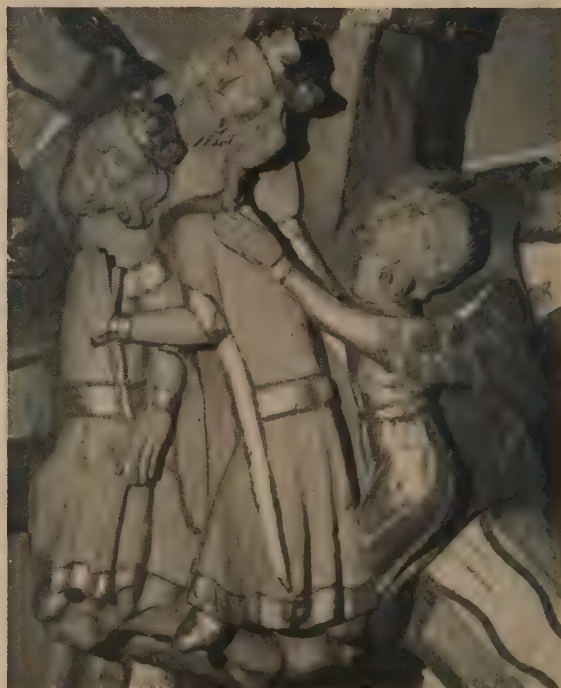


Fig. 3. The Journey of the Magi

are attached to a tail-piece. In most cases the strings of the citole are fastened to a bar across the belly of the instrument, but there are exceptions, as in this case.

Gittern, N 11 (pl. xxiv, fig. 7); this instrument closely resembles the citole, and it too is held horizontally and played with a plectrum; but the sides are incurved like those of a guitar; there are four strings attached to a tail-piece, which is in the form of a fleur-de-lis. S 2a (pl. xxiv, fig. 8) represents a second gittern, which differs from the last example in several particulars; the neck is longer and is, indeed, unusually long for this type of instrument; the sides are much less incurved, and the strings are attached to a bar across the lower part of the belly.

Guitar fiddle, N 12 (pl. xxiv, fig. 9); this has three strings passing over a bridge to a very small tail-piece; in many respects this instrument resembles a gittern, the sides are incurved; the bow is held over-hand, like a violin bow, and not under-hand like a viol bow.

Symphony, S 12 (pl. xxv, fig. 1); this has one string and apparently nine keys, which was the usual compass, but there should be more than one string. The handle is turned with the right hand and the keys are depressed with the left.

Psaltery, S 10 (pl. xxv, fig. 2); the instrument is of the usual type; it is held on the knee and played with the fingers: there appear to be seven strings.

Wind instruments:

Portative organ, S 9 (pl. xxv, fig. 3); there appear to be sixteen pipes; the right hand rests on the keys, and the left may be meant to be on the keyboard or else working the bellows. The bass pipes are to the right instead of to the left as is ordinarily the case: this is possibly done for artistic reasons.

Bagpipe, S 13 (pl. xxv, fig. 4); with mouthpiece, chaunter, and one drone. The wind-bag is shown quite free of the arm of the player; the single drone is trumpet-shaped, and is slightly curved in the body, not the bell; it is very short; the chaunter is rather large.

Shawm, S 16 (pl. xxv, fig. 5); with wide mouthpiece and ordinary bell-shaped end; the horn tip enclosing the reed is well shown.

Wind and percussion instruments:

Pipe and tabor, N 16 (pl. xxv, fig. 6); the whistle mouthpiece of the pipe is well shown; the pipe is held in the left hand as usual; the tabor is slung outside the bent left arm, instead of hanging under it as is more usual; a snare is shown. The stick is very large.

Percussion instruments:

Tabor, N 10 (pl. xxv, fig. 7); very similar to the last example, but no snare is shown; the tabor is balanced on the left arm as was often done, though the usual method was to hang it from the arm.

Timbrel, S 15 (pl. xxv, fig. 8); with four large sets of jingles; no snare is shown.

Cymbals, S 14 (pl. xxv, fig. 9); a pair of very small cymbals; the lower one rests in the hollow of the left hand; the upper one is held by a handle or strap.

In the quire of Gloucester Cathedral there is a set of bosses representing angels bearing musical instruments. The date of these would be about the middle of the fourteenth century, and I thought that they were possibly carved by the same hands as those at Tewkesbury. Mr. Sydney Pitcher has taken a beautiful series of photographs of these bosses, and a comparison of these with the photographs of the Tewkesbury angels leads me to think that they are certainly not by the same hand. The costumes are much the same, but there is more movement and originality about the Gloucester angels. One of them, the bozine-player, has the same curious arrangement of his cloak as one of the harp-players at Tewkesbury; the cloak is thrown over the right wing. The wings at Gloucester are treated differently: in most instances they have no feathers on the upper part of the wing, and the 'primary' feathers are narrower and more numerous than at Tewkesbury.

We now come to the angels bearing instruments of the Passion; there are four of these and they are at the east end of the nave. On the north side we have an angel carrying a spear in the left hand and a scourge in the right (pl. xxvi, fig. 1); the scourge consists of a long handle with a number, about six, of knotted cords at the end. The second angel (pl. xxvi, fig. 2) carries a long staff with a round top, the pillar of the scourging, in the right hand, and a scourge in the left; this is like the other scourge, but there are only knots at the ends of the cords. The first angel on the north side (pl. xxvi, fig. 3) carries a perfectly plain cross in the left hand and a scourge in the right;¹ the second angel (pl. xxvi, fig. 4) on this side carries a crown of thorns in the right hand and a small oval-shaped object in the left; it is difficult to say what this object is intended to represent; possibly the sponge that was soaked in vinegar and placed on the reed. This angel is different from the others in that the head is covered by a veil which falls over the shoulders. The nose has evidently been broken off and replaced, and both wings have been somewhat broken round the edges.

¹ The left wing has been considerably broken; the left edge seems to have been chipped, and the lower part has been broken off altogether.



Fig. 1. The Adoration of the Magi



Fig. 2. The Finding in the Temple



Fig. 3. The Entry into Jerusalem



Fig. 4. The Last Supper



Fig. 1. The Betrayal



Fig. 2. The Scourging

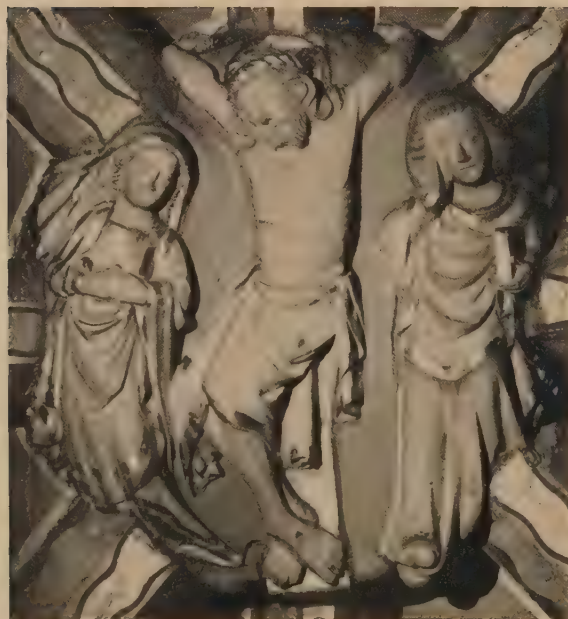


Fig. 3. The Crucifixion



Fig. 4. The Resurrection

These examples of Passion emblems are rather early; they are prior to the time when such emblems were treated as armorial bearings.

Just west of the above come the evangelistic symbols; each of these bears a large label, but no inscription is now visible on any of them. The most easterly on the south side is the eagle of St. John (pl. xxvi, fig. 5); the label is pierced by its right talons, and then lies sloping to the left across the breast, being held up by the left foot. The right wing is closed, the left extended above the figure. The figure is a striking one, but it is not very like an eagle; it is more like a hawk or a kestrel which the carver must have seen, while probably he had not seen an eagle. The next figure is the angel, or winged man, of St. Matthew (pl. xxvi, fig. 6); the figure sits on what is no doubt intended for a bench, and bears the label in each hand; the wings are extended on each side. On the north side is the winged lion of St. Mark (pl. xxvi, fig. 7); the label which is nearly hidden by the figure, is held in the right paw; the tail, which is curved between the hind legs, is very bushy. Lastly comes the winged bull (pl. xxvi, fig. 8), which strikes one as a very wooden figure.

We now come to the bosses of the central rib of the vaulting, which represent scenes from the life of our Lord, beginning with the Nativity at the west end.

The Nativity (plate xxvii, fig. 1). The figure of the Virgin is lying on drapery that hangs from the manger; her head is on a pillow; she is dressed in a close-fitting gown open at the neck, with close sleeves, fitting tightly round the wrists; there is a waist girdle; a veil is over the head, the ends hanging down over the shoulders and the hair is visible at the sides beneath the veil. The Infant Christ is lying in a manger in swaddling clothes; the right hand is raised in benediction, but all the fingers are extended; the head is bare and rests on a pillow. At the foot of the manger is the figure of St. Joseph, bearded and leaning on a very stout staff; he is represented in a long robe with a cloak which covers most of the arm. In Niblett's notes it is mentioned that the beard and chin alone remain, the top of the head being gone, and a note in pencil states, 'This head was restored in the week ending 18 May 78'. Above the manger are the heads of an ass and an ox, both looking down into the manger. Above the head of Christ is a demi-figure with a string and tassel hanging down from the neck. It is idle to speculate what this figure is meant to represent as the head is apparently modern; Niblett says 'over Mary remains of sitting figure (query angel) upper part above the knees gone'. I am not absolutely certain whether this was meant to represent a figure at all; may it not have been part of the stall of the stable and the cord be part of a halter?

(?) *The Circumcision* (pl. xxvii, fig. 2). The second boss from the west end is rather difficult to interpret. It has been considered to represent the shepherds at Bethlehem, but I think the figure on the right-hand side is meant for a woman, and if it represented the shepherds three male figures would have been included. I thought at first that it was the Presentation in the Temple, but if it were so I think it would have come after and not before the bosses representing the Magi. I am inclined to think that it is intended for the Circumcision. The figure of the Virgin stands before what on this interpretation would be the High Priest. She is dressed in a costume similar to that shown on the first boss, but she has long sleeves pendent from the elbow. The High Priest stands full face, and is dressed in a long close-fitting robe, with a broad waist-band; he also has pendent sleeves; in his left hand he carries what seems to be a large bowl. Behind the High Priest stands a female figure dressed in a plain robe like that worn by the Virgin, but with a wimple round the chin in addition to the veil over the head with a pendent end over the shoulder; she also wears long pendent sleeves. Behind the Virgin is a male figure in costume similar to that worn by the High Priest. Both of the male figures are bare-headed.

The Magi on their journey to Bethlehem (pl. xxvii, fig. 3). The Magi, one of them nearly hidden, are shown in long simple gowns, cut rather low at the neck with close-fitting sleeves, and sleeves pendent from the elbow; a broad waist-band is worn; the figures are bearded and have long hair; they are all crowned; behind them is an angel placing his hands on the shoulders of one of them; the angel wears a close-fitting gown with a waist-band; the head is bare and the hair long; the wings are extended behind. In front of the figures is part of a star; as Gambier Parry noticed, part of it is broken off.

The Adoration of the Magi (pl. xxviii, fig. 1). The Virgin, seated, is supporting the Infant Christ who stands on a stool or seat; before Him kneels one of the Magi, the other two stand behind. The Virgin is dressed in a simple gown with apparently an overmantle which covers the arm; on her head she wears nothing but a crown. Christ wears a simple, rather ample gown and His feet are bare. The Magi wear rather voluminous robes; the two standing are crowned, the kneeling figure is bare-headed; all three carry caskets in their hands. Above the figure of Christ is a large star. Gambier Parry says that the heads of this boss are 'terribly mutilated'.

The Finding of the Child Christ in the Temple (pl. xxviii, fig. 2). The Virgin is seated on a bench, before her stands the Child Christ on whom she is gazing, and whose two hands she holds in hers; both figures are clothed as in the last boss, but the overmantle of the Virgin can, on this boss, be seen

covering her shoulders and upper arm, with the end thrown back over the bench. This is the boss that, as has already been mentioned, was supposed to be the Infant Christ before the chief of the Doctors.

Christ's Entry into Jerusalem (pl. xxviii, fig. 3). Christ, sitting on an ass, is approaching the gate of Jerusalem; He is bare-headed and wears a simple and rather full robe; His left hand is raised in benediction, His right hand holds the reins. Behind and above Him are the twelve apostles; of most of them only the heads are visible; they are all bare-headed; seven of them are bearded; three of them carry books; one carries a smaller article; this may be Judas with his money-bag. On the sinister side of the composition is the gate of Jerusalem; the gateway itself with a window over it is flanked by octagonal turrets; round the whole are crenellated battlements. The whole has a pointed roof, and the turrets have pyramidal tops; near the top of each turret are windows with pointed heads; below is a cross-shaped loophole; at the window is a figure with his arm out of the window holding some object in the hand, apparently about to drop it on to the ground; on the ground is a large mantle, and what are evidently intended to be branches of trees; 'and a very great multitude spread their garments in the way, others cut down branches from the trees and strawed them in the way' (Matt. xxi. 8). Paget Moore in his memorandum on the bosses says 'there appears to be a figure of Satan on the right of the gateway'.

The Last Supper (pl. xxviii, fig. 4). Christ is seated at a table; on His right hand are the Virgin, and three apostles, on His left four apostles; St. John is prone on the table, his head in front of Christ, and Judas, holding a large covered salt, is kneeling in front of the table. Christ is clothed in an undergarment over which is a cloak fastened at the neck by a large clasp; the Virgin has a veil over her head; the apostles are dressed in rather full garments fitting fairly close at the neck. On the table are loaves of bread, and the apostles have their hands resting on these loaves; Judas is no exception. Christ has the right hand raised in benediction, His left hand is touching the head of St. John. Above all these figures are demi-figures of angels swinging censers; the two censers meet just over the head of Christ. It will be noticed that only nine of the apostles are represented.

The Betrayal (pl. xxix, fig. 1). Christ stands in the middle of the group; in front of Him is Judas kissing Him; behind Him are three soldiers in armour, and behind them a figure carrying a large lantern. Kneeling behind Judas is Malchus, and behind him is St. Peter severing his ear with a sword; Christ is touching the face of Malchus with His left hand. Besides St. Peter there are six other apostles, their heads only being visible. The chief point

about the costume on this boss is the armour of the soldiers. It is rather difficult to tell exactly what this is meant to represent as the surface of the only full-length figure that is visible does not show any representation of chain mail; the outer garment, however, seems to be the surcoat. The sword is of the pattern found on fourteenth-century brasses, but the shield is a small target-shaped one; the helmet is slightly pointed and bears a fan crest, similar to crests found on seals dating from about 1300. The other two figures have ridges down the front of the helmets, and in both cases vizors may be intended. Both the man carrying the lantern and Malchus have coarse features with thick and rather flattened noses.

The Scourging (pl. xxix, fig. 2). Christ stands with His hands bound round a somewhat slender pillar; He is wearing a garment reaching to below the knee; but He has been stripped to the waist and the upper part of His garment is hanging in folds. The face seems to be a good deal worn and may possibly have suffered in the whitewashing and subsequent cleaning. Round the head is the nimbus with the cross. On each side stands a figure holding the handle of a scourge, and in attitudes as though about to strike; each is bearded and is turning his head towards Christ; their features have obviously been made to look extremely unpleasant; the scourges show only the handles, which extend to the edge of the boss; the thongs were probably never shown. The feet of Christ are bare; the other two figures wear rather pointed shoes.

The Crucifixion (pl. xxix, fig. 3). Christ is shown in the attitude of crucifixion; His arms are stretched over the upper convex surface of the boss; the knees are bent, and the two feet are nailed together; there is no representation of a cross, except between the body and the feet, and that was painted in by Gambier Parry. Christ wears the crown of thorns, and round His head is a nimbus, on which no cross is visible. The wound in the right side is represented. On the dexter side of the composition the Virgin stands with her hands clasped across her breast. Over a close-fitting garment she wears apparently an over-garment open from the neck to the waist, with full sleeves with pendants at the wrists; over her head is a veil which falls over her shoulders and reaches to the elbow. On the other side stands St. John with a book in his left hand, and holding his right hand up to his cheek; he also has long sleeves pendent from the wrist.

The Resurrection (pl. xxix, fig. 4). Christ is stepping from the tomb; a cloth, probably intended for linen, is draped over His two arms and reaches to the knees; in the left hand is borne the cross of the Resurrection to which is attached a banner with a plain cross on it; one arm of the cross is broken. The right hand was evidently raised in benediction, but it has been broken off. The



Fig. 1. The Ascension



Fig. 2. Pentecost



Fig. 3. The Coronation of the Virgin

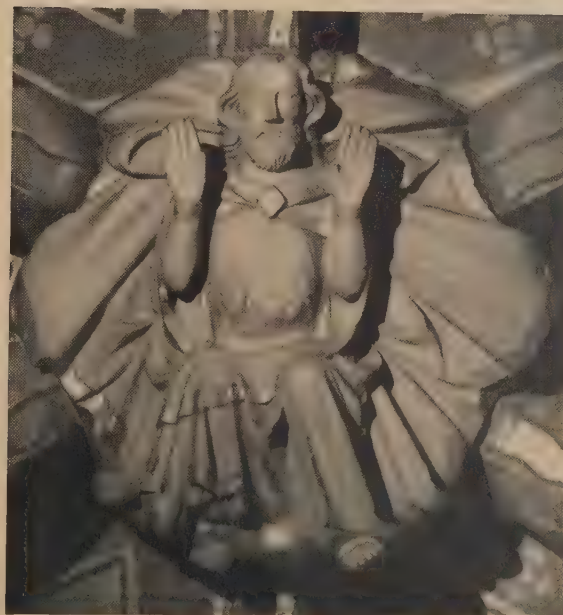


Fig. 4. God the Father

wound in the side is shown. On each side of Christ is an angel; each, with wings extended, kneels on one knee on the top of the tomb and swings a censer upwards. Below are demi-figures of soldiers probably intended to be in surcoats; one carries a spear, the other two have swords fastened to the right side; all three have heater-shaped shields, the two figures with swords carrying them on the left arm. All three have helmets with a ridge down the front and vizors; one figure is closing or opening his vizor.

The Ascension (pl. xxx, fig. 1). This boss and the next are carved with much finer detail than the other bosses and remind one of alabaster figures. The feet of Christ and the lower part of His robe are seen disappearing into conventional clouds. Below is a group with the Virgin in the middle and with six apostles on each side of her. Her costume is similar to that shown in the Crucifixion except that she wears no veil; her hair hangs down over her shoulders; the apostles wear an undergarment and a cloak the end of which crosses over and is carried over the opposite arm. St. Peter carries a key, and three of the apostles carry books; all are bearded.

Pentecost (pl. xxx, fig. 2). This is a very similar boss to the last one, but above the group of the Virgin and apostles is the Holy Ghost in the form of a dove flying downward; three of the apostles carry books; one only is not bearded.

The Coronation of the Virgin (pl. xxx, fig. 3). Christ and the Virgin are seated side by side on a throne. Christ is crowned; He wears a flowing robe, but at the wrists the sleeves of a closer-fitting undergarment can be seen; His left hand is resting on a globe and His right hand is raised in benediction. The Virgin is crowned; she also has a veil which hangs over her shoulders, and her hair is long and also falls over the shoulders; she has a close-fitting undergarment, with a waist-cord with a pendent end. Over this she wears a long mantle open in front and draped over her knees.

God the Father (pl. xxx, fig. 4). A seated figure with both hands raised and all the fingers extended; as has been mentioned already, there are no signs of the stigmata, and I think there is little doubt that the figure is meant to represent God the Father. The costume consists of a fairly close-fitting undergarment with sleeves fitting quite close at the wrists; over this is worn a very voluminous outer-garment, draped over the knees, and extending out on each side, rather as though blown out by the wind; it is fastened just below the neck by a diamond-shaped clasp. The feet are bare and between them is a globe.

This boss at the east end concludes the series of the nave bosses. To judge by the costumes and by the armour of the military figures it would seem that the date of these bosses is round about 1320, or even a little earlier.

84 ROOF BOSSES IN THE NAVE OF TEWKESBURY ABBEY

My thanks are due to Canon E. F. Smith, the Vicar of Tewkesbury, for kind permission to photograph the bosses, and both to him and to Mr. Davies, the verger, for continued assistance during the times I was taking the photographs. I am also much indebted to Major C. J. ffoulkes, F.S.A., for information on points connected with the armour represented on some of the bosses, and to Mr. William Bentley for information on the musical instruments carried by the angels.

VI.—*Corfe Castle : its history, construction, and present condition.* By
SIDNEY TOY, Esq., F.S.A., F.R.I.B.A.

Read 13th December 1928.

CORFE CASTLE is situated in the centre of the Isle of Purbeck, about ten miles SW. of Bournemouth, and midway between Wareham and Swanage. The Isle of Purbeck is bounded on the north by Poole Harbour and the river Frome, on the west by the stream called Luckford Lake, and on the south and east by the English Channel. It is bisected by a range of chalk hills which stretch across the isle from east to west and attain a height at one point of over 600 ft. In the middle of the range is a great gap forming the natural pass from the northern portion of the island to the coasts of the southern portion and called by the Anglo-Saxons Corvensgeat or Corfe-Gate. Commanding this pass, and set in the midst of it, is a precipitous hill which rises to a height of about 200 ft. and is almost surrounded at its foot by streams forming a natural moat. Upon this hill the castle of Corfe is built (figs. 1, 2, 3).

One of the earliest mentions of the Corfe Gate occurs in the Anglo-Saxon Chronicle under date 979 and refers to the murder of King Edward the Martyr. 'This year was King Edward slain at eventide, at Corfe-gate, on the 15th before the Kalends of April, and then was he buried at Wareham, without any kind of kingly honours.' An ode is appended but no further details are given. The circumstances are narrated at greater length by William of Malmesbury and other chroniclers, who attribute the crime to the instigation of the king's step-mother Elfrida. The king on his return from hunting called upon his step-mother, who lived in a neighbouring mansion, and while his attention was engaged in giving her the salute he was mortally wounded by her attendants.

Corfe Castle is not mentioned in the Domesday Survey under that name, but there is very good reason to suppose that it occurs under the name of Wareham. It appears almost certain from the Anglo-Saxon charters that at the time of the Domesday Survey the site of Corfe was within the manor of Kingston, a manor which was held by the abbey of St. Mary and St. Edward at Shaftesbury. Domesday Book contains this entry *De manerio Chingestone habet Rex i hidam in qua fecit castellum Warham et pro ea dedit Sancte Marie ecclesiam de Gilingeham cum appendiciis suis.* Now the Book of Fees, commonly called

Testa de Nevill, referring to this same transfer of the advowson of the church of Gillingham states that *Advocacio ecclesie de Gillingeham data fuit abbacie de Sancto Edwardo in escambium pro terra ubi castellum de Corfe positum est.*¹



Fig. 1. Map of the Isle of Purbeck.

Here, in a later document, therefore, with reference to the same transaction, the castle is called by its present name. The town of Wareham itself was Crown property, having been transferred among the possessions of Edward the Confessor, and therefore William would have no occasion to buy any of the land on which it stood.

That a castle existed at Corfe at the close of the eleventh century is indicated by the character of the great wall surrounding the upper ward, most of which still remains. According to Benedict of Peterborough, Robert duke of Normandy, brother of Henry I, was imprisoned here when brought from Normandy in 1106. Benedict says that Robert, having been overcome in the battle near Tinchebrai, had his eyes put out, and was held in captivity in the castle called Chorf in England for the rest of his life.²

¹ *The Book of Fees*. Ed. 1920, part I, p. 91.

² *The Chronicle of Benedict of Peterborough*. Ed. Will. Stubbs, 1867, vol. i, p. 329.



Fig. 1. Corfe Castle from the west

Photo. J. Frith & Co.



Fig. 2. Corfe Castle from the south

Photo. F. Frith & Co.



Photo. F. Frith & Co.

Fig. 1. Corfe Castle from the east

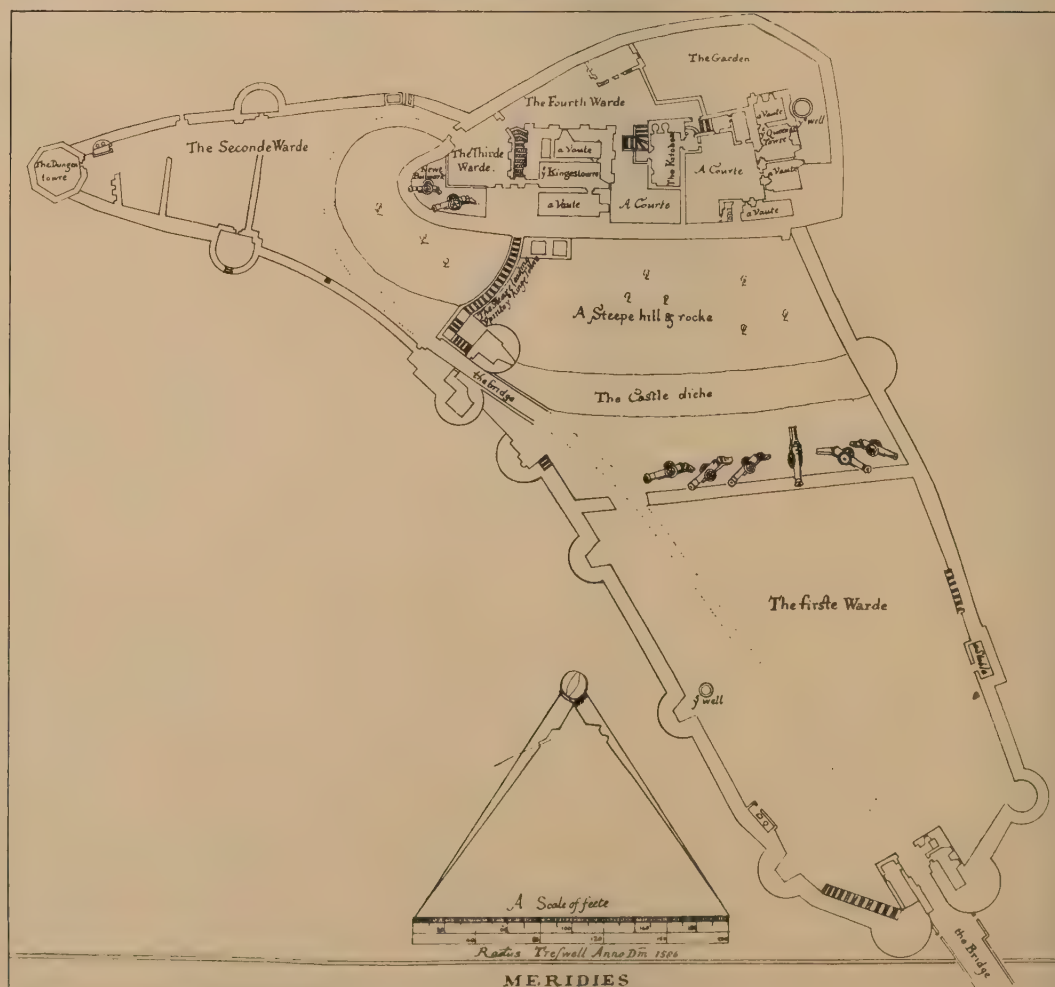


Fig. 2. Plan of Corfe Castle, drawn by Ralph Treswell, 1586

spent, first on the construction and embellishment of buildings within the upper enclosure, and then on the extension and perfection of the defences beyond that enclosure. The Close and other Rolls contain numerous references to such expenditures.

The great keep, called the King's Tower, to judge from its design, construction, and details was built during the latter years of Henry I. Before this time there must have been buildings of a domestic as well as defensive nature within the shell, but since no trace of these is now to be seen their character must be a matter of conjecture. They were doubtless placed against the shell walls, as at Trematon and Restormel, where the original corbels for the support of the roof still remain. Outside the shell, however, in what is now the middle bailey, are the remains of a rectangular building which still preserves sufficient details to show that it is of early Norman date. But this building has no defensive, as it certainly has no ecclesiastical, characteristics. Its construction, design, and the position it occupied, where protection could only be effected by a palisade, suggest its use as a store or outbuilding of a subsidiary nature.

After the keep was built little seems to have been done for about seventy years until the reign of King John. During this reign an enormous sum of money was spent in new buildings and repairs. Another tower, to which the name of Gloriet was given and which contained the long hall, was built. This building was ready for occupation by 1215, for on the 25th May in that year the king commanded Peter de Maudlay, constable of Corfe, that should Robert de Drewes land in his jurisdiction he was to be entertained with due honour and hospitality *in aula nostra in ballio castri et si placuerit ei in turrim intrare: illam et alia ei exponatis*.¹ It is clear that the *aula* here belongs to a building quite distinct from the tower, or keep, and must therefore refer to the hall in the Gloriet.

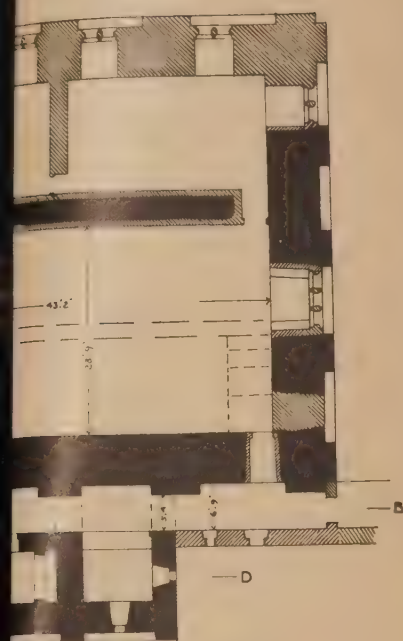
Having built his sumptuous gloriet, the king was determined to put the castle into a more thorough state of defence. There can be no doubt but that the ditch, called John's ditch, was dug at this period. For on 23rd November 1214 John ordered William de Harecourt to send to Corfe fifteen of the king's miners and quarrymen (*minatores et petrariorum*) *quatinus ipsos operari faciat in dora fossati apud castrum nostrum de Corfe*.² This evidently refers to the work of digging the ditch. When completed, this ditch constituted a most formidable defence to that side of the castle hitherto the most vulnerable. It was cut right across the brow of the hill from east to west, its north

¹ Patent Roll, 16 John 1215, memb. 1. *Rot. Lit. Pat.* 138 b.

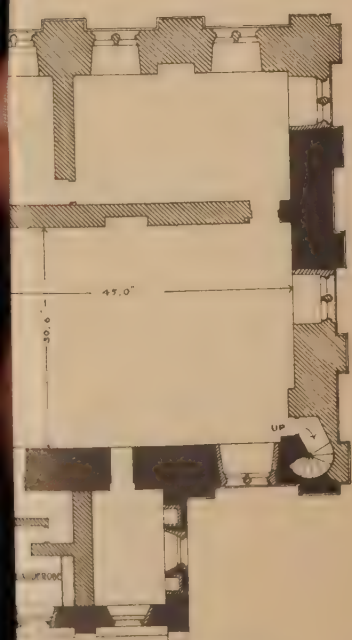
² Close Roll, 16 John 1214, memb. 15. *Rot. Lit. Claus.* 178 b. This entry is repeated in 16 John, memb. 10. *Rot. Lit. Claus.* 185.



- 12TH CENTURY
- ▨ 16TH CENTURY
- ▩ PARTS THROWN DOWN



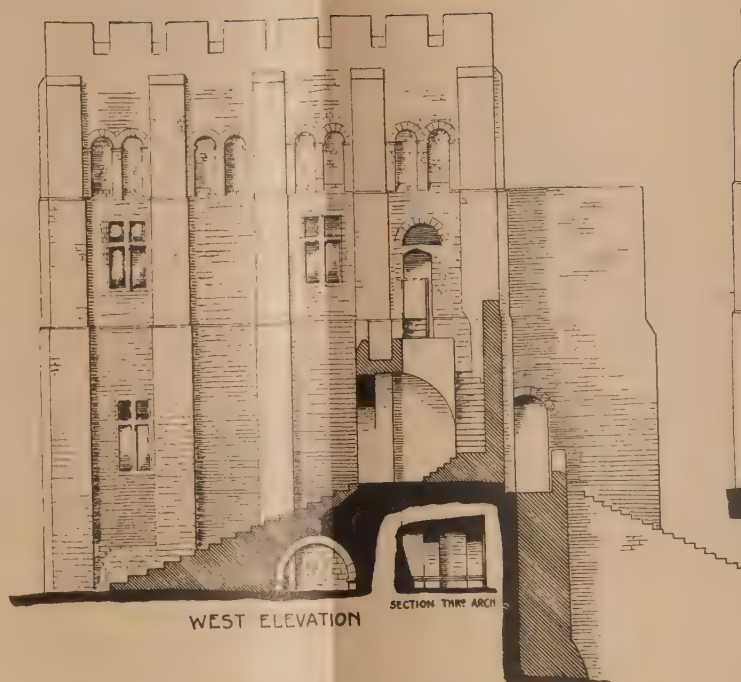
PLAN OF GROUND FLOOR



PLAN OF FIRST FLOOR

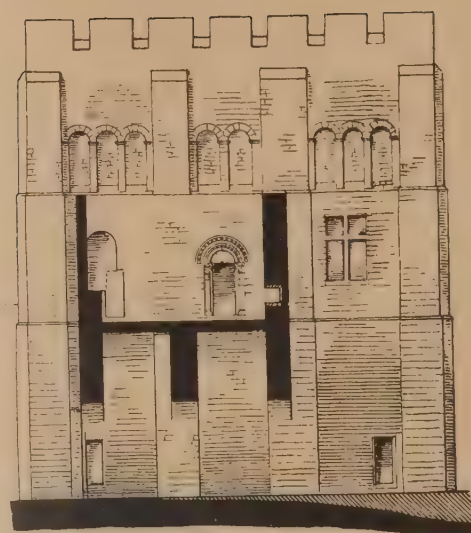


ELEVATION OF DRAINS

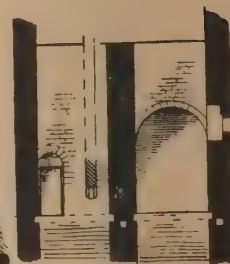


WEST ELEVATION

SECTION THRU ARCH



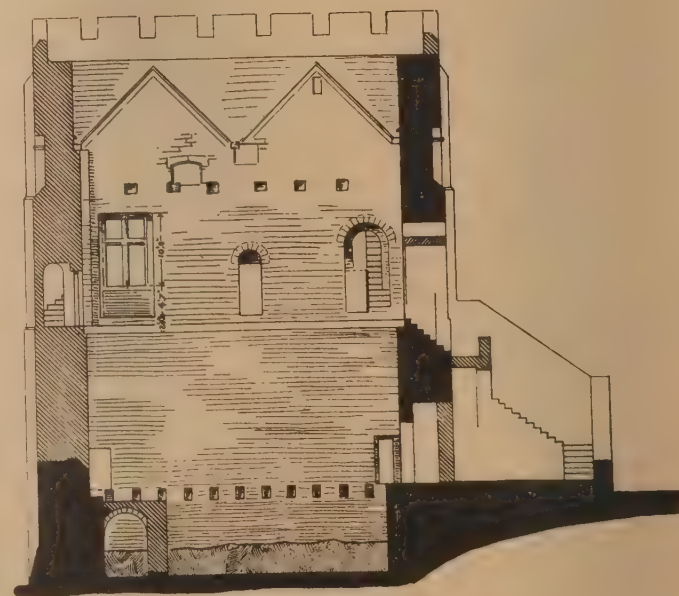
SOUTH ELEVATION. THRU A.B.



SECTION C.D.



SECTION LOOKING WEST



SECTION LOOKING SOUTH



CORFE CASTLE: THE KEEP

SIDNEY TOY. P.R.I.S.A. MENS. ET DELT.
OCTOBER. 1927.

bank rising precipitously to the curtain wall (pl. xxxix, fig. 1). Further, the defensive armament of the castle was strengthened by the addition of two stone-throwing engines. On 16th May 1215 the king ordered the constable of Gloucester to send to Corfe, under safe custody and by a secure route, one 'mangunellus' and one 'petraria' with all the apparatus belonging to them.¹

John imprisoned here his niece, the high-spirited Eleanor, whose personal attractions won for her the name of the Beauty of Brittany. Eleanor's imprisonment in this country lasted until her death at Bristol forty years afterwards in the following reign. John also sent to Corfe Margery and Isabel, daughters of William king of Scotland. William had committed the offence of arranging the marriage of one of his daughters without the sanction of the king of England, his overlord. This action was resented by John with force of arms, and in order to appease the king William delivered his two daughters into John's custody to be disposed of in marriage. Beyond keeping them at Corfe, the king does not appear to have taken any further steps in regard to their disposal, but they were both married in the following reign. At one time Queen Isabella herself was imprisoned at Corfe.

It is not to be supposed that these ladies were kept in durance vile. On the contrary, short of absolute liberty, all the refinements of life belonging to their degree were granted to them. The Close Rolls contain many entries of the king's commands to the mayor and reeves of Winchester and to the constable of Corfe regarding their comfort. Thus on the 6th July 1213 the mayor of Winchester was commanded to send in haste to the king for the use of Eleanor, Margery, and Isabel, robes of dark green, namely, tunics and super-tunics, with capes of cambric, and fur of miniver, and twenty-three yards of good linen cloth; also tunics and supertunics and cloaks with capes of miniver, or rabbit skins, and furs of lamb skins, and thin shoes for their use and the use of the three waiting-maids; also for the use of the king's niece one good cap of dark brown, furred with miniver and one hood for rainy weather, and also for Eleanor's use one saddle with gilded reins.² And again on the 5th August of the same year the mayor and reeves of Winchester were ordered to send to Corfe for the use of the king's niece a beautiful saddle with scarlet ornaments and gilded reins.³ Many notable persons were imprisoned at Corfe by later monarchs, especially by Edward II, and that unhappy king himself passed some of his last days here before his murder at Berkeley Castle.

During the long reign of Henry III there is continuous reference to the sums spent on the castle of Corfe and the purposes to which the money was

¹ Close Roll, 16 John 1215. *Rot. Lit. Claus.* 200 b.

² Close Roll, 6 July, 15 John 1213, memb. 9. *Rot. Lit. Claus.* 144.

³ *Ibid.*, 5 Aug. 1213, memb. 6. *Rot. Lit. Claus.* 150.



Fig. 1. The Middle Gateway



Fig. 2. The Keep. Fragment of east wall.
Exterior



Fig. 3. The Keep. Fragment of west wall. Showing
entrance from fore-building into hall and vault over
the rampart walk

Photo. F. Frith & Co.



Fig. 4. The Keep. Fragment of east wall.
Interior. Showing remains of upper door-
way, gutter, and parapet



Fig. 1. The Inner Bailey from the west. Showing fragments of the bailey wall and of the east and west walls of the keep



Fig. 2. Window of hall, converted into a doorway



Fig. 3. The Keep. Newel-stairway from hall to parapet



Fig. 4. The Keep. The south wall. Interior

applied. By the end of the reign practically the whole castle was completed as it stood before it was dismantled in the seventeenth century. It is difficult to trace in many of these records the precise buildings indicated, though in the case of some of them there can be little question. But by a comparison of the works themselves with the records the sequence of building indicated is as follows: first, the two walls east and west of the north part of the outer bailey; secondly, the middle bailey with its gateway; and, thirdly, the outer bailey with its wall-towers and gateway (pl. XL).

In 1235 there is an expenditure of £62, *in duobus muris bonis faciendis loco palicus quod est apud Corff inter vetus baillium eiusdem castri et medium baillium ibidem versus occidentem et similiter loco alterius palicus inter turrim eiusdem castri et forinsecum baillium versus austrum*.¹ It is difficult to identify the precise position of these two walls, since the present outer bailey was not built at this period. But by comparison with other expenditures in the same year they appear to be those flanking the steep bank rising from John's ditch.

Corfe was one of the castles demanded from the king by Simon de Montfort, but in 1263 it was again held for the king and fortified by Henry, son of the earl of Cornwall, on his secession from the barons. In 1261 the sheriff of Dorset and Somerset was ordered to make a stable in a convenient place within the castle of Corfe large enough for twenty horses, and to repair the gates and bridges of the castle without delay.² Whether or not this large stable was built it is not possible to say. But in the fabric roll of a century later (1366-8) is the statement that *unum parvum stabulum factum est de novo in inferiori warda*.³ This last is doubtless that represented in Treswell's plan and now swept away. Its capacity of about five horses corresponds with the description, *unum parvum stabulum*.

The chapel of St. Mary within the castle is often mentioned in the records from Edward I to Edward III. Between 1338 and 1341 Walter Mogga, a mason, was employed 'in cutting free-stone for the stairs before the chapel of the Blessed Mary in the upper dunjon' and also 'in cutting stone for the steps leading to the tower'.⁴ Both these stairways remain in part, one leading to the gloriet, the 'upper dunjon', and the other leading to the tower, or keep. The king appears to have had chambers in the gloriet as well as the queen, and there are references to windows between the chapel and the king's chamber and to the chamber above the chapel. All this agrees with the site of the chapel indicated on the drawings. That there was a building here of

¹ Pipe Roll, 20 Hen. III. E. 372, no. 80, memb. 16.

² Liberate Roll, 41 Hen. III, memb. 11, no. 37.

³ Exchequer Accounts Various, 41 Ed. III, 461/5, memb. 4.

⁴ *Ibid.*, 13-14 Ed. III. E. 101, 460/27, memb. 3.

delicate and elaborate construction is clearly shown even in the scanty details still existing, while the present condition of the building suggests that the full fury of the Parliamentarians was directed against it.

The construction of the outer bailey appears to have been begun about 1269. In that year Henry III ordered Thomas de Sancto Vigore and the sheriff of Somerset and Dorset to pay Henry of Germany, his nephew, and Alan de Plokenet, wardens of the castle, one hundred pounds for work done at Corfe,¹ and the tower at the north-east of the bailey is doubtless the first portion of the new work built. This tower stands across the head of John's ditch at the foot of the wall running up the steep bank to the inner bailey. It bears the shield of Alan de Plokenet on the east face. By 1280 the bailey was probably complete, for the constable's expenses for that year include amounts for iron-work for the outer gate, and for a bridge.²

Several works were carried out during the reign of Edward III. The stable, above referred to, was built in the outer bailey and in 1376 a new bridge was made.³ The position of the bridge is not specified, but it was probably before the middle gate, its stone piers being incorporated in the supports of the present bridge. Between 1377 and 1379 Richard II built a new tower called La Gloriet.⁴ This new gloriet was doubtless the building at the north of the inner bailey, only fragments of which now remain. Henry VII repaired the castle at enormous expense for the reception of his mother the countess of Richmond.

Corfe remained in royal possession, save for a few short periods, until 1562. Queen Elizabeth then sold it to the Lord Chancellor, Sir Christopher Hatton, who made many alterations, chiefly in the addition of upper storeys to the keep, and in opening out large windows in it.

In 1635, on the eve of the Great Rebellion, the castle was sold to Sir John Banks, Lord Chief Justice, ancestor of the present owner. Sir John had received the command of King Charles to attend him at York in 1641, and Lady Banks, anticipating the impending storm, retired to Corfe Castle with her children. For about two years the castle remained unmolested, but from May 1643 until March 1646 this great lady held the castle with a comparatively small garrison against almost overwhelming odds. The engines and artillery of the Parliamentary forces were directed against its walls without avail. In October 1645 Corfe was the only castle held for the king between Exeter and London. Indeed, the fortress proved quite impregnable against all

¹ Liberate Roll, 2 April, 54 Hen. III, 46, memb. 7.

² Exchequer Accounts Various, 8-9 Ed. I, E. 101, 460/27.

³ *Ibid.*, 51 Ed. III, 1376-7, 461, no. 7.

⁴ *Ibid.*, 1-3 Richard II, 461, no. 9.

the attacks from without and was only taken eventually through the treachery of one of the garrison.

The splendid resistance offered by the castle was not without its effect upon Parliament, which, having acquired it, ordered its destruction forthwith. The demolition was undertaken with unusual vehemence. The towers and walls were undermined and blown up with gunpowder. The great keep and the long hall with its chapel and apartments were utterly shattered, and the curtain walls generally overthrown. There can be no more eloquent proof of the strength of this magnificent fortress than is shown by the thorough and apparently vindictive manner in which it was destroyed, when at length it fell into the enemy's hands (pls. xxxi, xxxii).

In October of 1927 I devoted five days to the survey of the ruins of the castle. After a careful examination and measurement both of the parts standing and of the portions overthrown and lying on the ground, it was found possible so to piece the fragments together as to reproduce practically the whole castle as it existed before its destruction by order of Parliament in 1646; and this despite the very deliberate and thorough manner in which the demolition was carried out. Most of the principal buildings, as the great keep, called the King's tower, the long hall with its adjoining apartments, and the two gatehouses, can be reproduced with practical accuracy, as also can the walls of the three principal wards with the towers attached to them. All these have been plotted and drawn to scale in plan, section, and elevation. Some of the minor buildings, such as the kitchen and domestic offices in the upper bailey and the stables in the outer bailey, have been destroyed completely or are represented at present only by foundations and fragmentary masonry. In order to indicate these buildings use has been made of a ground-plan of the castle, drawn in 1586 by Ralph Treswell, steward of Sir Christopher Hatton, and preserved at Kingston Lacey (pl. xxxii, fig. 2). Two other drawings preserved in the same collection, which are evidently plans of the keep before its destruction, have assisted in the restoration of the keep.

The primary object of this paper is to place before the Society the results of the survey made in 1927, to describe the several buildings as they appeared before 1646, and their condition at the present day.

By a comparison of the historical record outlined above with the buildings themselves I find that the shell crowning the hill was built soon after the Conquest, while the fragmentary building in the middle bailey is of about the same period. The keep was built during the later years of Henry I. The long hall with the chapel and royal apartments attached to it, together called the gloriet, was begun by John and finished by Henry III. Henry III also built the middle bailey and the first part of the outer bailey, the outer bailey being

completed by Edward I. Henry VII added a new gloriet to the north of the inner bailey; and finally, at the time of Elizabeth, Sir Christopher Hatton made considerable alterations, particularly to the keep, and repaired the bridges (pl. XL).

The masonry throughout the castle is of most excellent quality. The walls are faced with a very durable limestone, quarried locally, and the core is composed of chalk and rubble. So powerful is the mortar employed that whole masses of masonry, having fallen from a great height, have held together so tenaciously as to remain on the ground unbroken. The west tower of the middle gate was undermined and has dropped vertically, with half the archway attached to it, a distance of eight feet. Yet the whole of its masonry has held together without disintegration or fracture (pl. xxxiv, fig. 1). Aesthetically this castle, from whatever point of view it is seen, is one of the most striking and imposing ruins in the country.

The shell wall follows round the brow of the upper platform and is 12 ft. thick on the south side and 9 ft. 4 in. thick elsewhere. Before John's ditch was dug the fall of the ground on the south of the castle must have been relatively gradual. It was, therefore, desirable that the wall should be especially strong here. Necessity for protection on this side doubtless also governed the position of the keep, which is built immediately inside the south wall.

The foundations of the early structure in the middle bailey were laid bare about fifty years ago by Mr. Thomas Bond¹ and proved to follow the lines shown on the plan (pl. XL). Only the south wall now remains. This is of herring-bone construction 3 ft. 4 in. thick and contains three original windows. Externally the windows are simply square-headed loop-holes 6 in. wide and flush with the outer face. Internally the jambs are splayed and crowned with a round arch (fig. 4). The character of this wall, when considered in relation to the plan of the building of which it formed a part, suggests that the wall is the remaining portion of the undercroft of a two-storeyed building of eleventh-century date, built under Norman influence.

The keep (plate xxxiii) was a rectangular building of two lofty storeys and an undercroft. Each storey was divided into three compartments. Externally the storeys were marked by off-sets and the walls strengthened by buttresses and a deep battered plinth. A blind arcade, interrupted only by the buttresses, ran round the upper part of the walls (pls. xxxiii and xxxiv, fig. 2). Originally entry was by a doorway at the south-west of the upper storey. This doorway was approached, first by a straight flight of steps constructed against the side of the keep and carried over a barrel-vault with heavy ribs, and secondly, by

¹ *History and Description of Corfe Castle*, by Thomas Bond, B.A., Lond., 1883, p. 60.



Fig. 1. Fireplace, rebuilt in cottage at south of village



Fig. 2. The Keep. Vault over rampart-walk, from the east



Fig. 3. Plokenet shield on east face of the Plokenet tower

flights of steps contained in a fore-building. Parts of the first flight, and the shattered vault over which it was carried, still exist; and the last steps of the flights in the fore-building can be seen in the entrance doorway itself (pls. xxxiv,

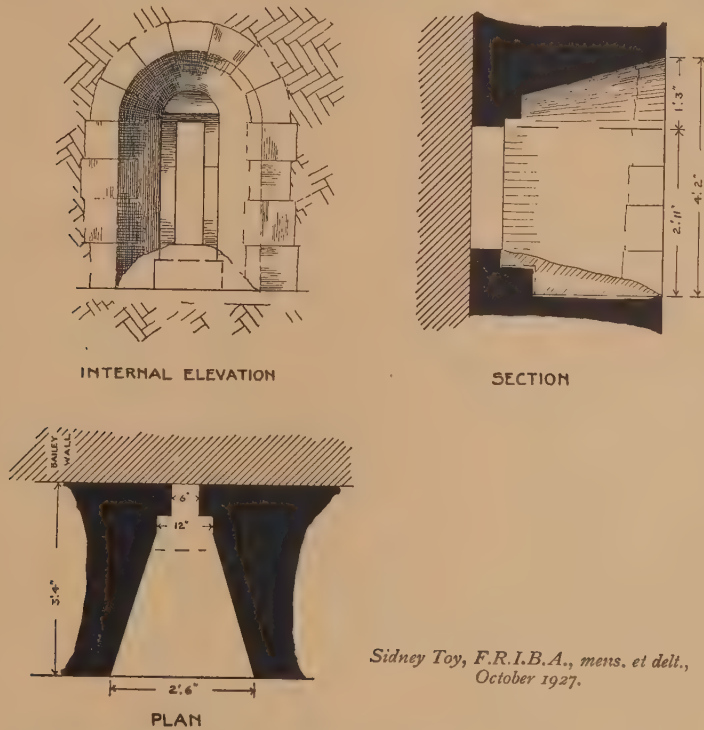


Fig. 4. A window of the Early Norman wall in the Middle Bailey.

fig. 3, and xxxv, fig. 1). The ground floor and the first floor were each divided into three compartments. Fragments of the cross-wall running east and west still exist and contain remains of a doorway in each stage. The lower doorway was plain, but that on the first floor was embellished by shafts with carved capitals and abaci and by moulded arches (pls. xxxiv, fig. 4, and xxxv, fig. 1). I have seen no traces of the other cross-wall, but this is doubtless because the destruction here has been so thorough. The wall is shown in Treswell's plan of 1586. In the centre of the south side of the keep on the first floor is one original window (pl. xxxv, figs. 2 and 4). Its carving and mouldings are of a similar character to those of the doorway in the cross-wall; when the addition was made to the keep on the south, this window was converted into a doorway and its opening has been, therefore, considerably mutilated. The walls containing the principal fireplaces have been destroyed, but a stone fireplace, probably taken from the keep and rebuilt in its present position, stands in the cottage of Mr. Hibbs at the south of the village. It has an opening 5 ft. 11 in.

wide by 4 ft. 1 in. high and is a fine example of the period of Henry VII (pl. xxxvi, fig. 1).

From the first floor the parapet was gained by a newel-stairway at the south-east corner (pl. xxxv, fig. 3). This was constructed on a spiral vault, and parts of it, as well as of the entrance doorway from the first floor, still remain, some in their original position and some fallen on the ground 40 ft. below. No trace remains of the stairway leading from the first floor to the ground floor, but at some late period a doorway was made opening directly to this floor from the fore-building. The keep was covered by a twin roof having a valley running north and south along the middle. The line of the verges of the roof, where it joined the south wall of the keep, is seen in pl. xxxv, fig. 4, and the gutter on the east side in pl. xxxiv, fig. 4, above the doorway. The roof itself was concealed by the enclosing walls of the keep, which were carried up above the line of the ridges.

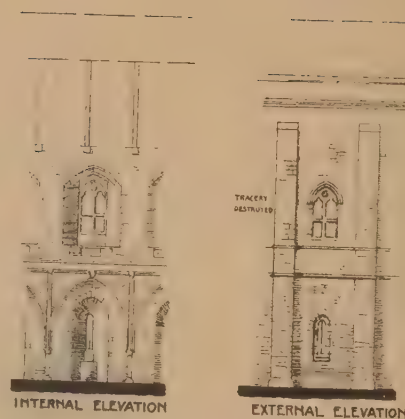
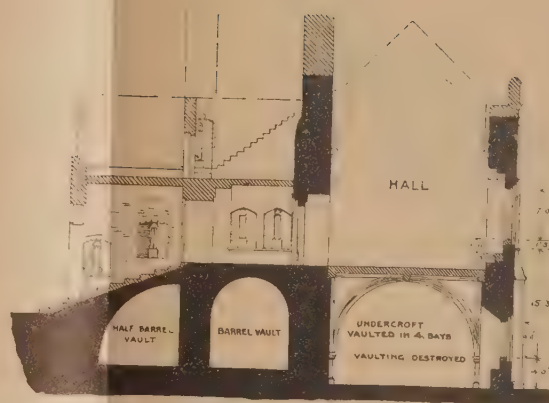
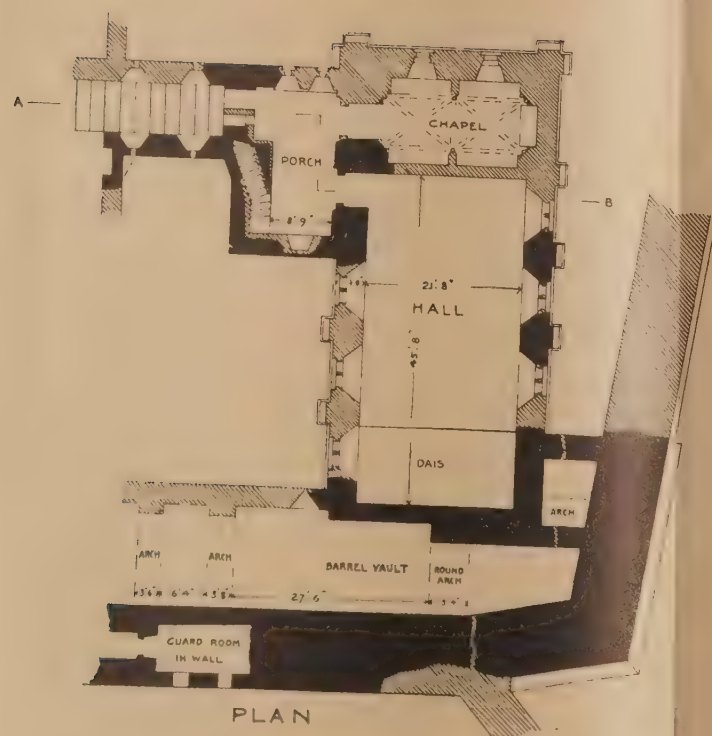
Shortly after the keep was built an addition was made on the south. This was constructed against the external face of the shell-wall of the castle and connected to the keep by a lofty barrel-vault, spanning the rampart-walk. The south portion of the lower stage was divided by a thick cross-wall and had a garderobe on the west, and a guard-room, opening for its full width to the rampart-walk, on the east. Originally the upper stage also had a cross-wall, but this has disappeared. The vault over the rampart-walk is divided by a transverse arch which supported the upper cross-wall (pls. xxxiv, fig. 3, and xxxvi, fig. 2).

The long hall, the chapel, and the royal apartments attached to them (pls. xxxvii and xxxviii), were approached by a wide and easy stairway on the west. This led to a porch having two wide doorways, one leading to the hall and the other to the chapel. The arch at the entrance to the porch is broken away, but there is a peculiarity about the jambs and springers, which are 19 in. higher on the north than on the south, suggesting that actually there were two arches here (fig. 5). The hall was of four bays and had a vaulted undercroft. It was lighted by twin-light windows with plain tracery and covered by a timber roof, some corbels of which still remain. Moulded string-courses run round the walls and buttresses externally (pl. xxxviii, fig. 2). At present there is no trace of a fireplace. Of the chapel only the south-west corner remains, but the mouldings here of the shaft and springer of the ribbed vaulting which covered the chapel are sufficiently well preserved to indicate the delicacy and ornate character of the whole. Only the undercroft of the buildings on the south of the hall remain, while the royal apartments to the north of the hall are now represented by low walls. The kitchen has been swept away entirely.

CORFE CASTLE.

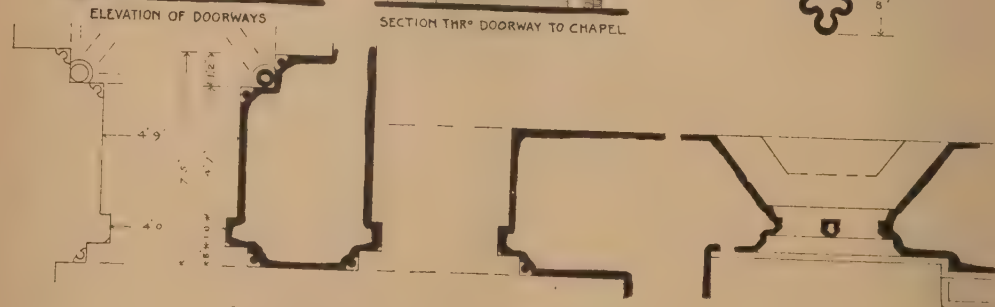
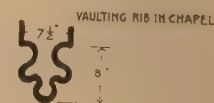
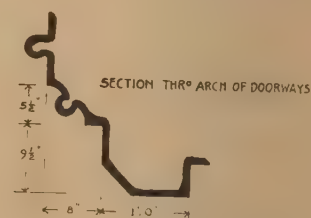
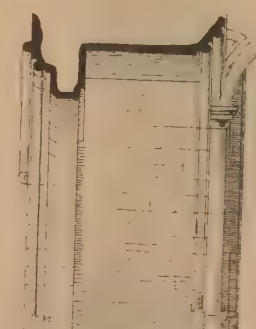
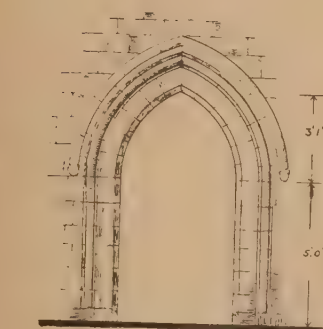
THE HALL AND CHAPEL

■ PARTS EXISTING
 ▨ PARTS DESTROYED



BAY OF HALL

10 5' 0 10 20 30 40 50 60 FEET.



Sidney Toy, F.R.I.B.A., mens. et del. October 1927

CORFE CASTLE: THE HALL AND CHAPEL

The middle bailey is enclosed by a curtain wall of coursed rubble, 7 ft. thick, which follows round the precipitous crest of a lower platform. The wall was strengthened by three towers. The north tower, which alone remains standing, has four loops and was covered by a timber roof, the roof being

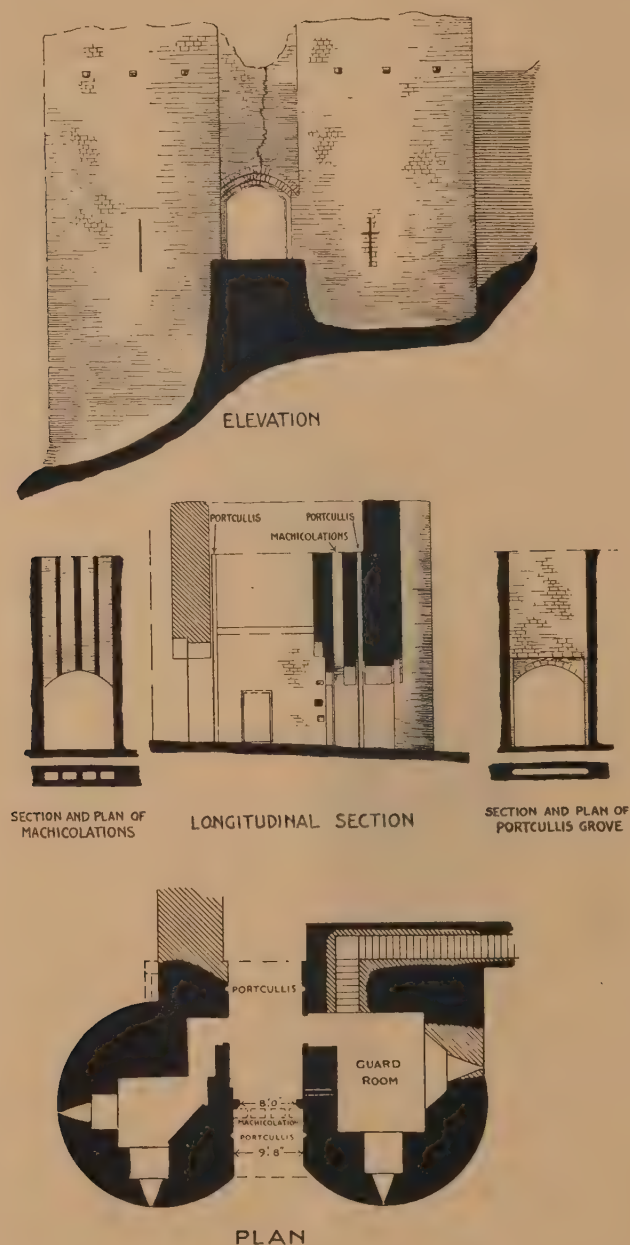


Sidney Toy, F.R.I.B.A., mens. et delt. October 1927.

Fig. 5. Entrance to the porch of the Long Hall.

protected and concealed by the walls of the tower, which still retain the verge-courses and the rain-water outlet (pl. xxxviii, fig. 3). The south tower has fallen down. The west tower, called Butavant, was a large octagonal structure of considerable strength. Only the eastern portion of the newel-stairway remains standing. Its lower storey was evidently ill lighted, if lighted at all, and, to whatever purpose this undercroft was devoted, it had to be cleansed in 1280, and candle-light was required for the purpose.¹ The tower was shattered in 1645,

¹ Exchequer Accounts Various, 8-9 Ed. I, E. 101, 460/27.



Sidney Toy, F.R.I.B.A., mens. et deli. October 1927.

Fig. 6. The Middle Gateway.

and, having become disintegrated by the weather, a large portion of it was blown down by a gale in 1866. There is a blocked opening in the curtain west of the north tower. This is shown on the plan of 1586 and may have



Fig. 1. The Long Hall from the west

Photo, F. Frith & Co.



Fig. 2. The Long Hall from the east



Fig. 3. Tower in north wall of the Middle Bailey.
Interior



Photo. F. Frith & Co.

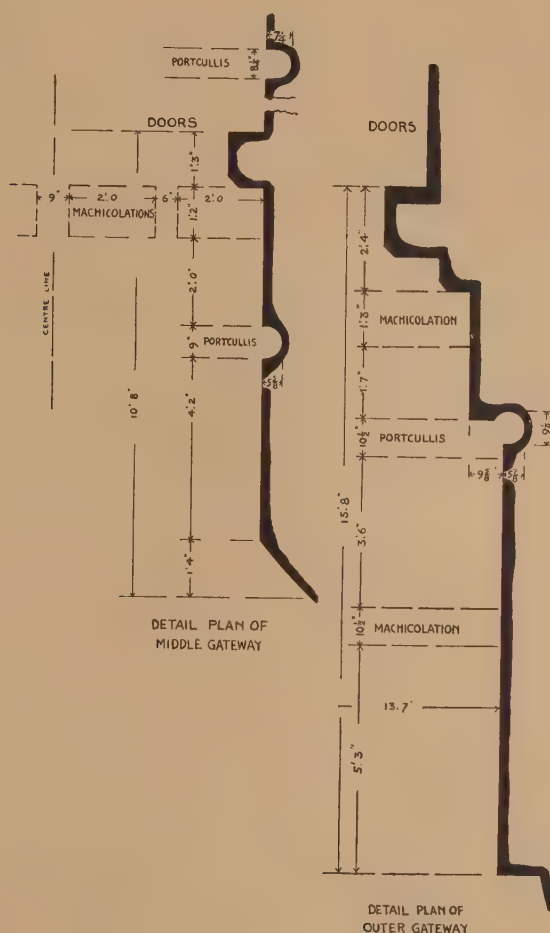
Fig. 1. The Keep, the Middle Gateway, and John's Ditch



Photo. F. Frith & Co.

Fig. 2. The Outer Gateway

been a sally port. But all the dressings of the opening appear to have been removed before it was blocked, and nothing can be seen now to indicate its original character.



SIDNEY TOY F.R.I.B.A. MEAS. ET DES. OCT. 1927.

Fig. 7. Detail plans of the Gateways.

Approach to the bailey is from the east, through what is now the middle gateway, built on the west bank of John's ditch (fig. 6 and pls. xxxiv, fig. 1, and xxxix, fig. 1). The strength of the masonry of this structure has already been described. Its design is no less remarkable. Each of the flanking towers contained a guard-room on the lower floor and had walls of great thickness. A stairway from the room on the north led to the rampart ascending to the keep. The plans of the upper floors can be followed in part only. The gate

itself when closed was secured by three heavy timber bars drawn across the gateway. There was one portcullis before the gate and another on the inner end of the gateway, while between the outer portcullis and the gate was a line of four machicolations divided by webs of masonry (figs. 6 and 7).

Perhaps the most striking feature of the great outer bailey is the relative strength of its flanking walls. The west wall is 10 ft. 6 in. thick and defended by four wall-towers, while the east wall is 7 ft. thick and had only two towers. The reason is obvious on examination of the site. On the west the fall of the ground is relatively gradual, while there is a large flat and open space at the foot of the hill from which attack might be expected. On the east the fall is precipitous and there is no such vantage ground beyond. The west, therefore, was the more vulnerable side. The wall-towers here are pierced by loops 12 ft. high, which commanded the outer face of the walls and the field. The wall crossing the south end of John's ditch is of a different character from the rest both in construction and thickness. It had no rampart-walk, but the four loops it contained were probably approached by timber staging, which could be quickly erected or removed as the defence found desirable. Between the two southernmost towers of the west wall are the remains of a sally port, which was defended by a heavy timber bar.

A large portion of the east wall has been razed to the ground, but the tower near the gateway, which is of two stages, is almost complete. Of the stable nothing can be seen in its original position, but a portion of it lies some distance down the slope, where it was recognized by our Fellow Mr. Harold Sands. The other tower stands at the head of John's ditch and has on the outside face a sculptured shield bearing a bend indented (pl. xxxvi, fig. 3). This charge was borne by the Plokenets and it is very probable that this tower was built by Alan Plokenet, who was constable of Corfe in 1269. A newel-stairway on the north probably led to the rampart-walk between this tower and the great shell wall. Both the towers on this side are circular inside and outside. There appear to have been three stairways leading from this ward to the ramparts, two of which have been destroyed, but fragments of the third, near the outer gateway, still remain.

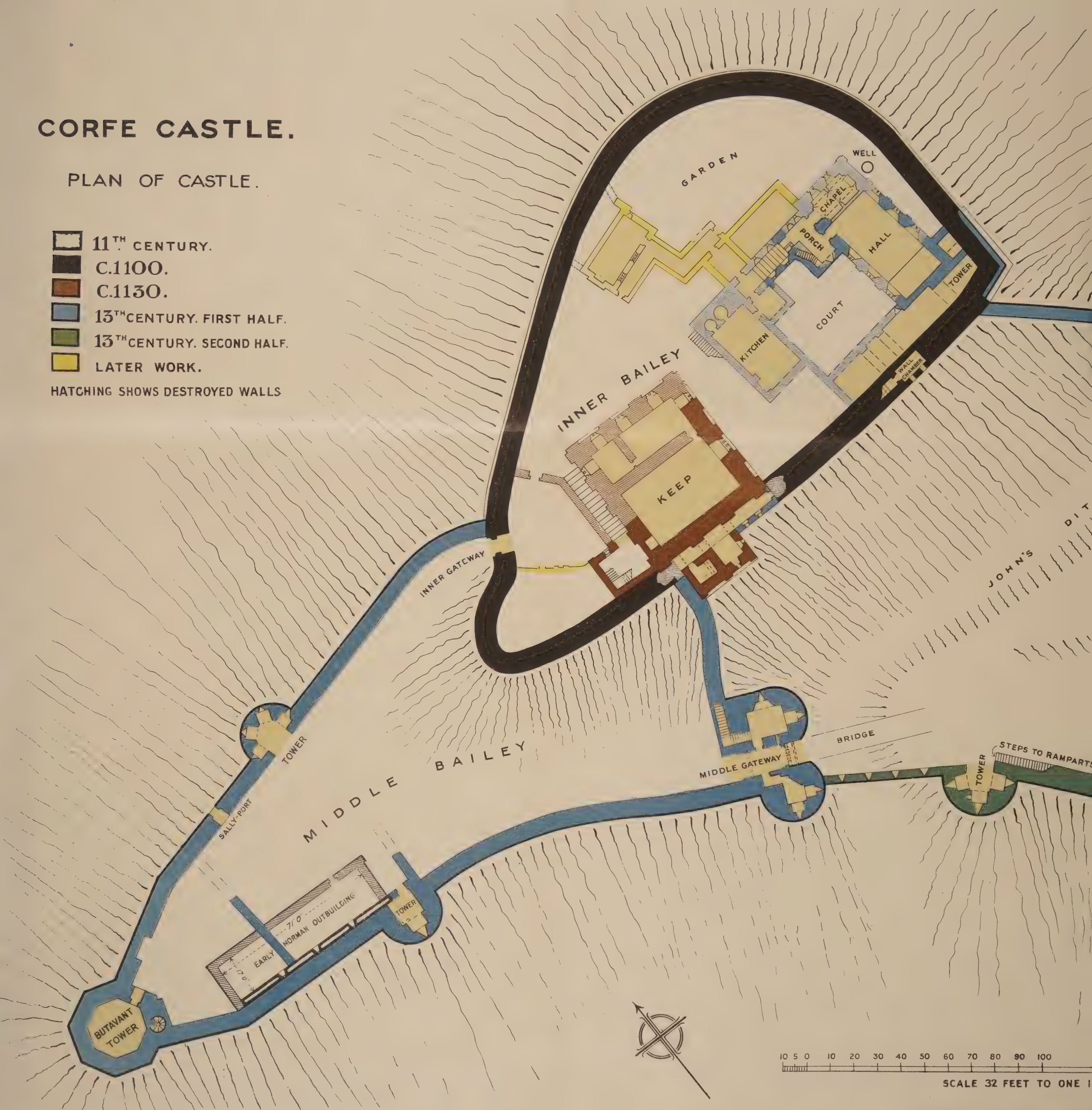
The outer gateway is of still more formidable construction than the middle gateway (fig. 8 and pl. xxxix, fig. 2). Here the flanking towers are quite solid in the lower storey, but extensive accommodation for the guard was provided behind the gateway. The guard-rooms were covered by lofty barrel-vaults, portions of which still remain, while the foundations of the rooms themselves can still be traced below the grass. The gate was defended by two machicolations, each extending the full width of the gateway and spaced 6 ft. apart, and by a portcullis between the machicolations (figs. 7 and 8). Considering the

CORFE CASTLE.

PLAN OF CASTLE.

- 11TH CENTURY.
- C.1100.
- C.1130.
- 13TH CENTURY. FIRST HALF.
- 13TH CENTURY. SECOND HALF.
- LATER WORK.

HATCHING SHOWS DESTROYED WALLS





design of the middle gateway, there was probably an inner portecullis also in this gateway, but all traces of it have disappeared. The walls of the upper

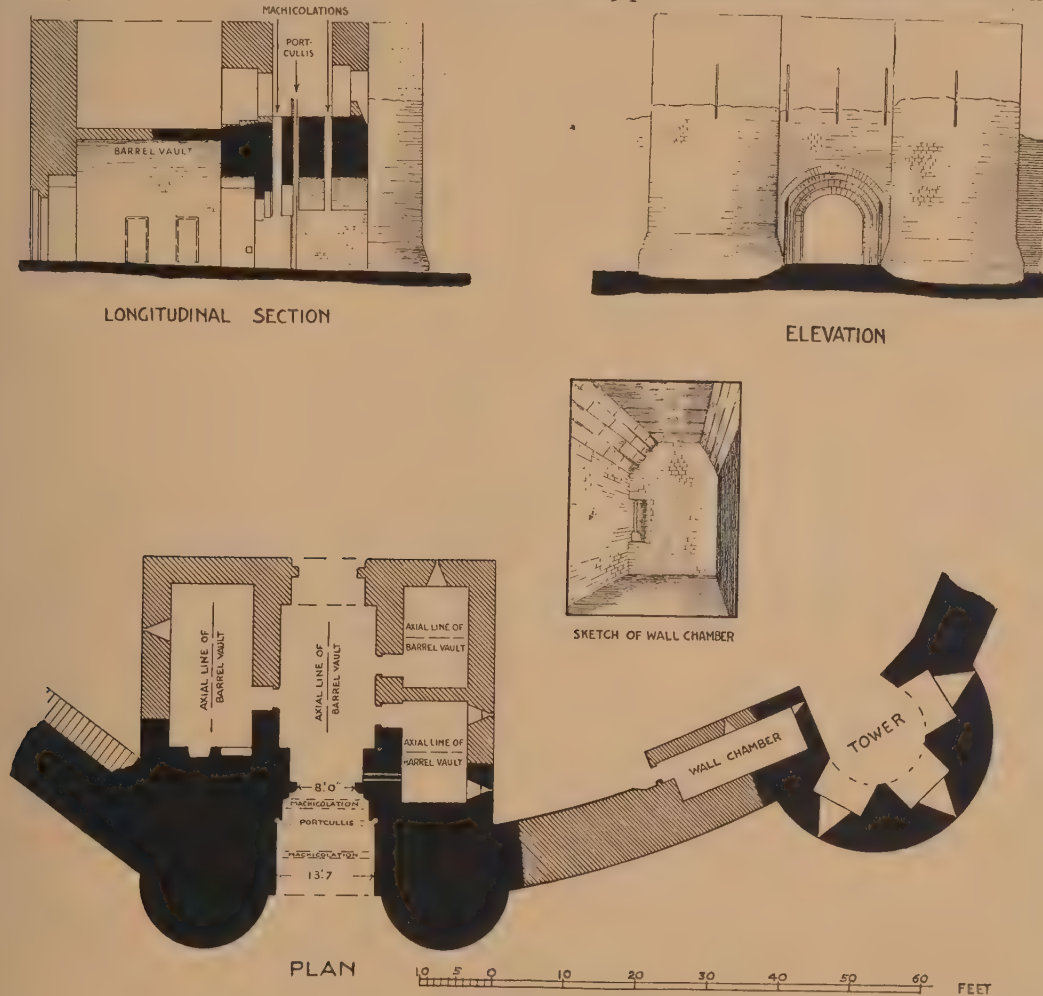


Fig. 8. The Outer Gateway with the adjoining tower and wall chamber.

Sidney Toy, F.R.I.B.A., mens. et delt. October 1927.

storeys have been destroyed, but the lower parts of the loops defending the gateway still exist (pl. xxxix, fig. 2). Adjoining a tower to the north of the outer gateway there is a wall chamber the purpose of which is somewhat obscure. It is 6 ft. 3 in. wide and 10 ft. 8 in. high, but since only one end of it remains, its length is unknown. Its vault is constructed of flat stone slabs, supported on four courses of encorbelment (fig. 8).

Both the outer moat and John's ditch are now spanned for their full width by stone bridges. The arches of both bridges are probably the work of Sir Christopher Hatton, but the piers on which they stand are of the thirteenth

and fourteenth centuries. The head of each was originally commanded by a drawbridge. Among other works ordered to be carried out at Corfe on 5th February 1239, repair of the *pontem colehicium* was included.¹ This doubtless refers to the bridge leading to the middle gateway, the only one then existing. The constable's accounts for 1281-2 include seven shillings and sixpence paid for four cords of hemp for raising the bridges of the castle, both bridges having then been completed.²

Before concluding, I must express my great indebtedness to our Fellow Mr. Harold Sands, who has unreservedly placed at my disposal his great store of knowledge on the subject and has rendered invaluable assistance in the production of the paper at every stage. In addition he has contributed largely towards the cost of the illustrations. My thanks are also due to our Fellows the Rev. E. E. Dorling, who has kindly read the proof, and Dr. Dru Drury, to whom I am indebted for the photographs of the shield and fireplace on pl. xxxvi.

I have attempted here to direct attention to the salient features of the subject only. Sufficient has been said, however, to indicate that this castle is one of the finest examples of military architecture of the middle ages in the British Isles. After careful examination of its ruins, it is impossible not to be stirred with admiration at the strength of its construction and the skill of its design. Despite its shattered condition, Corfe Castle is a priceless possession.

¹ Liberate Roll, 23 Hen. III, memb. 20. The mandate for this fragment occurs twice on the Roll under the same date and place; first in memb. 21, where the obscure word *colehicium* is rendered *collehisium*, and again here, where the scribe wrote part of the word, viz. *collehis*, crossed this out and rendered it *colehicium*.

² Exchequer Accounts Various, 10 Ed. I, 460/27, memb. 2.

VII.—*The Excavations on the Temple of Nabû at Nineveh.* By R. CAMPBELL THOMPSON, Esq., M.A., D.Litt., F.S.A., Fellow of Merton College, Oxford, and R. W. HUTCHINSON, Esq., M.A., F.S.A.

Read 31st January 1929

THE present article gives the account of the excavation of the Temple of Nabû in Kouyunjik, the larger mound of Nineveh, under British Museum auspices. A brief description has already been given in our *A Century of Exploration at Nineveh* (Luzac, 1929, referred to herein as *CEN*), and so we shall avoid repetition so far as is consistent with due description. Besides the excavation of this temple, our digging revealed the first chambers of a palace of Ashurnasirpal at 23' to 26' depth,¹ and in digging out part of a house built by Sennacherib for his son Ashuršumušabši (?) (here abbreviated to *SH*) we found a practically perfect prism of Esarhaddon, and about fourscore more pieces of prisms of Sennacherib, Esarhaddon, and Ashurbanipal (see *CEN* 83), as well as numerous pots and lamps.²

¹ That is, judging from the brick inscriptions of this king and his son Shalmaneser *in situ* (see nos. 56-9, 64). At the same time the bricks of Ashurnasirpal also mention the Temple of Ishtar, and the inscription on the sculpture (nos. 4-10) may be a record of his restoration of that temple: from the *zigâti*-inscriptions nos. 122 D, F, and O we learn that the Temple of Nabû was '*ina tih*' the Temple of Ishtar. From a comparison with the building texts of Sennacherib we must at present assume that the Temple of Ishtar lay in the central ridge somewhere between the Temple of Nabû and Sennacherib's palace, while our new palace of Ashurnasirpal occupies a site on the SE. front of the Temple of Nabû.

This palace is the objective of the next expedition, 1929-30. The money which we had been able to collect (partly from the interest on Miss Gertrude Bell's bequest, partly from donations from the Percy Sladen Memorial Fund, the Research Fund of the Society of Antiquaries, also from Mr. O. C. Raphael, F.S.A., and Miss Eleanor Hull, and from the sale of copies of *CEN* at the British Museum bookstalls) has now been augmented by Sir Charles Hyde, who has not only made up the deficit necessary for the first season, but is generously providing the whole cost of two more seasons. The last week's excavation at the end of the 1928 season revealed its chambers in a good state of preservation built of brick walls, with brick pavements (bricks 1' 7" × 1' 7" × 4½"), containing a flat (now semicircular) piece of limestone with a broad rim, originally 30" diam.: a marble door socket 2' 7" × 2' 1" (with hole 12" diam. × 10" deep): a stone mill (?) with circular grooved gutter, and hole for outflow: and the great Tukulti-Ninurta inscribed slab (no. 1), and the clay tablet no. 122 A. The pottery was both glazed and plain, like that of the temple, but with a few shapes paralleled only in *SH*.

² In 1903 Dr. L. W. King reopened the excavations at Kouyunjik on behalf of the British Museum, and I joined him in 1904. The actual discovery of the temple-site was made in the autumn of 1904 after he had gone home, but the existence of the temple and its library had long been

The provenance of each object found is marked by a Roman followed by an Arabic numeral, which indicates the superficial position and depth from the surface respectively. Buildings, conversely, are represented by their position in feet relatively above or below (+ or -) the top of the Sargon well, which is taken as the zero line. The surface of the earth above the well-top was about 10'-11' higher: at the SE., SW., NE., NW. edges of the temple about 16', 13', 11', and 7' respectively. At the same time a very little study will show the disturbed state of the mound, and the uncertain value of evidence as afforded by the record of depths.

(A) THE ASSYRIAN TEMPLE OF NABÛ (NABÛ AND MARDUK) OF THE
EIGHTH-SEVENTH CENTURY B.C.

The name of the original founder is lost, but according to *sigâti*-inscriptions of Sargon it was built 'in the time of the new great gate' (*nos. 122 D, F, and o*). The first restoration was made by Adad-nirari III in 788 B.C. (*ibid.*, and *Eponym Canon*). It was restored again by Sargon (721-705 B.C.) (see *no. 69 ff.*), and its pavements were repaired by Ashurbanipal (*no. 44*). The position of this temple is just to the S. of the southern corner of Ashurbanipal's palace, which would appear, from Rassam's map (*Trans. Soc. Bibl. Arch.*, vii. 37, and see pl. LXII), to have made a re-entrant at this corner, so close did the temple lie to it, and it may be that this consideration for the amenities of the temple bears out what Ashurbanipal says of his palace (Prism x, 78) 'I was fearful in the presence of the sanctuaries of the great gods, my lords, and did not raise the structure of that terrace overmuch'. Its SE. frontage abutted on a broad pavement (at least 200' x 15'), which may perhaps mark part of a roadway along

known. By February 1905 the inner rectangle of the temple had been cleared, not merely to the floor level about 10' or 12' down, but almost always to a depth of 20' and sometimes 25'. When the excavations were reopened in 1927-8 for the purpose of clearing the outer rectangle, the cost was borne by the British Museum, the Percy Sladen Memorial Fund, Merton College, Oxford, and myself, while Mr. R. W. Hutchinson volunteered to come as my assistant for his bare expenses. The whole of the eighth-century temple (with the exception of a very small area in the W. corner, where the solid late masonry has destroyed all hope of Assyrian remains) has now been cleared, down to the surface of the massive *libn* (unburnt brick) foundation which is about 10' thick. Mr. Hutchinson and I shared the work on the excavations; more particularly, his province was the pottery and the Greek inscription, while to me, apart from the general direction, fell the cuneiform, the drawings, and the maps (most of which have been redrawn professionally). We are greatly indebted to Sir Frederic Kenyon, the Director of the British Museum, for his care and interest in fostering the undertaking in every way from the beginning, and to Dr. H. R. Hall, the Keeper of the Egyptian and Assyrian Department, for his readiness to help us: and to Mr. R. S. Cooke, then Director of Antiquities at Bagdad, for the way in which he assisted the expedition whenever he could. Major Jardine, and after him, Major Wilson, at Mosul, were equally ready to do anything they could for us. Finally our thanks are due to the Governor of Mosul for the pleasant memories of our sojourn in Mosul.

the top of the mound from N. to S., and this was repaired by Ashurbanipal, with inscribed slabs (*no. 44*), which were set herein and in other restorations usually face downwards, the total number of these slabs reaching originally perhaps 400. This pavement was about 1' 6" higher at its SW. end than at its SE. end, and it lay at an angle of 32°-33° E. of N. In or just beneath it was found a fine but broken piece of sculptured marble, representing Sennacherib's campaign in the marshes with marsh Arabs in boats, and the capture of a fortress called Ki-in ... (see pl. LVIII, fig. 6). The Temple of Ishtar must have been somewhere in this direction, judging from the *sigāti*-inscriptions *nos. 122 D, F, and o*. Originally the area of the temple appears to have been about 190' square, the SE. front lying at an angle of about 32° E. of N., but the NE. and NW. fronts were apparently altered by Sargon and more correctly orientated, like the Sumerian buildings. This reduced the sides to 190' (SW.) by 170' (SE.), and 190' (NW.) by 150' (NE.). The explanation of this variation is perhaps to be found on the inscriptions *nos. 122 D, F, and o*, where Sargon explains that repairs were made in such a way as not to alter the position of the temple with the Temple of Ishtar.

The foundations consisted of (*a*) an *Outer Base* of massive unburnt brick, about 10' thick, on which the chambers had been built, containing (*b*) an *Inner Rectangle* of earth 103' × 78'. The top of the *Outer Base* (*a*) was about 3' above the zero-level of the well-top, 4' above the SE. paved frontage, and 9' above the floor of the adjacent palace of Ashurnasirpal, of which we discovered the first chamber in our last week (*CEN 82*), and the great difference in the levels of this palace and the temple-floor of Sargon shows first that it was probably the restoration by Sargon which raised the temple to this height, and secondly, in consequence, the palace of Ashurnasirpal must have been in ruins and forgotten by the end of the eighth century.

Little trace of buildings was left on this outer base (*a*), due probably to their having been made of walls of unburnt brick. Even the exterior walls were made of this perishable material, which soon collapses if exposed un-repaired to Mesopotamian weather. These exterior walls were based, like those of the modern garden-walls in Mosul, on a layer of limestone lumps, so that the original lie, at all events, was easily traceable.

One interior pavement of limestone slabs, about 17' × 11', marked a court towards the S. corner (pl. LIX, fig. 3), each of the slabs (except one) being either wholly or in sections inscribed with the dedicatory text of Sargon (*no. 69*) and set face upwards. At some later date a shaft had been dug down through the pavement from above, and in its earth we found sherds of the period tenth to twelfth century A.D. These later shafts or holes were frequent in this outer base.

There was a gateway in each side, the best being to NE., marked by a heavy threshold slab $5' 3'' \times 4' 1'' \times 9\frac{1}{2}''$, also inscribed with the same text (*no. 69*), but larger. Two round holes had been drilled longitudinally in the SE. edge, doubtless for staves for easier transport. There were remains of a well-laid pavement in front, about 15' square, repaired also with Ashurbanipal's inscribed slabs. The line of the old wall from the N. side of the door was still marked by 15' of revetting stone wall.

The NW. and SW. gates were less important, but near the latter was a large limestone door-socket. The SE. gate was equally simple, the walling being marked by the courses of its ruined base built on the long pavement restored by Ashurbanipal. Near here, beneath the pavement, we found almost the whole of the Ashurbanipal prism in pieces, giving his restoration of various temples.

The *Inner Rectangle* (*b*) doubtless contained one or more courts by which the chambers surrounding it were lighted, as well as the vegetable garden for the priests. This was cleared in 1904-5 to a depth of from 20' to 25' from the surface, and in the SE. side, partly let into the *libn*, was a well, built or restored by Sargon, 6' square inside. It was the discovery of this well with its numerous bricks inscribed with Sargon's dedication (*no. 70*) which finally settled that we had at last, after two years' search, found the temple. The inside was carefully revetted for several yards down with bricks, many of them inscribed as above, the lower part being left without any casing: their dimensions were $1' 1'' \times 1' 1'' \times 4\frac{3}{4}''$, or, if 'headers', $1' 1'' \times 6\frac{1}{2}'' \times 4\frac{3}{4}''$, and they were set with clay (not mortar or pitch). We found water at 90' depth, and in the mud at the bottom some bronze buckets, and from this well the pieces of bronze gates (?) came.¹

On the opposite side of the courtyard was a privy, also containing Sargon's bricks, a simple slit in the floor with a drain leading off.

(B) THE DESTRUCTION OF THE TEMPLE IN 612 B. C.

The temple, like the rest of the buildings on the mound, was burnt in the general *débâcle*, the ash strata being obvious, particularly on the top of the Sargon courtyard (about 3' above the well), where the fallen *libn* of the walls was marked in a well-defined mass 2' thick above the ash. At VIII the ash-line lay on the *libn*, 1' 3'' below well-level, the *libn* here being lower than on the SW. end of this side: it was plainly marked above the - 1' wall-base, and

¹ The latter published by Nassouhi, *Mitth. d. Altor. Gesellsch.*, iii, 18, *ana iṣu Nabû bēl-šu m Šargina šar mātu Aššur ana balaṭi -šu BA . EŠ* 'Unto Nabû, his lord, Sargon, king of Assyria, for his life has presented.'

below the +0' 7", showing that the +0' 7" repairs were made after the Destruction. Outside the temple, near the SE. end of the -2' 3" wall in the E. corner, ash lay thick, and near the SE. doorway at xv the ash was 6" thick about 1' 6" below the level of Ashurbanipal's pavement, while at xxi it lay 1' 6" above this pavement. This ash confirms all the traditional accounts of the Destruction.

It is not easy to explain the presence of the three repairs in the E. corner (+0' 7", +2' 5", and +4' 2"). All are subsequent to the Destruction; +0' 7" included the big E-Akit block (*no. 43*), probably filched from Sennacherib's Temple: +2' 5" included pieces of sculpture both of Ashurbanipal and Sennacherib. Indeed, there are many repairs on the SE. side.

(C) THE OCCUPATION OF THE TEMPLE SITE AFTER THE DESTRUCTION

In *CEN* 139 will be found the evidence for the later occupation of the mound in general. Briefly there appears to have been a gap between 612 B.C. and the Seleucidae, under whom the mound appears to have been occupied. In 1904-5 was found a Greek inscription on a cylindrical block of limestone in the Inner Rectangle (see p. 140). We found fragments of red pottery on the site, to be attributed to the first century B.C., and of *terra sigillata* of the first century A.D., and two lamps of the third century (pl. LV, nos. 217 and 'VI, 6'). Layard's discoveries of this and subsequent periods will be found in *Nineveh and Babylon*, 591; we can add a hoard of Sassanian silver coins of Bahram V, A.D. 420-38.¹

The sixth and seventh centuries A.D. may be marked by the fragments of pottery stamped with medallions of animals, etc., in relief; the eighth to ninth centuries are marked by barbotine ware (see p. 139).

From the ninth to the fourteenth centuries the site above the temple is marked by a succession of five (perhaps six) buildings, ranging from +6' 10" to +10' 3", a difference of only 3' 5". The walls were of solid stone and cement, and the floors of thin cement: and the best preserved portion of the 5th(6th)

¹ We are indebted to Dr. G. F. Hill for his identification of the coins of this hoard, and for the following found on the temple site (except one from the surface):

(Parthia) bronze, Phraates II, 138-128/7 B.C. (xxv, A, 15): bronze, Syrian (?) or Mesopotamian (?) city, with Seleucid (?) or Parthian (?) portrait head, 1st cent. B.C.: bronze of Tarsus, *obv.* head of city, *rev.* pyre of Sandon, 2nd-1st cent. B.C. (xiii, B, 7): (Parthia) silver drachm, Orodes I, 57-38/7 B.C.: three silver tetradrachms (two from 1, 9) (Parthia), Phraates IV, 38/7-3/2 B.C.: bronze, Vespasian (?) (A.D. 69-79) (xxiii, 12): bronze, Domitian, Antioch (A.D. 81-96) (v, 8): bronze, Antioch, imperial coinage of 1st-2nd cent. A.D.: bronze, Licinius I, *rev.* IOVI CONSERVATORI -SMK, Cyzicus, A.D. 312 (surface of mound): bronze, Anastasius I, A.D. 491-518, Constantinople, 40 mummia: bronze, Justinian, A.D. 527-65, Constantinople, 40 mummia (xxvii, 1). From Mosul town came the following bronze: Zangid Dynasty, Nasir-al-Din Mahmud (A.D. 1219-34) and Badr-al-Din Sulu (A.D. 1234-59).

building was a portico set on a cement floor, the doorway being approached from the NW. by a step, and flanked by two small columns (the bases set in or on the 6th cement floor), giving entrance to a small atrium. A second long step up (marked 'L') to the higher cement floor was made by a revetment of cement and bricks 8" high. From this point to SE. began a succession either of restorations or of fresh buildings up to the 2nd cement floor. The 4th (+8' 10") contained a blue-glazed sherd of Sultanabad type embedded in it: the 3rd (9' 1") was particularly marked by three oil presses (see *CEN* 141): the 3rd and 2nd (10' 3") were marked by pottery of blue and mottled glaze, Mosul jugs, and, in the case of the 3rd, yellow lustre ware. 6' 6" from the surface (6' 0" above Sargon's well) was a kind of receptacle or pot, embedded in cement, 3' x 1' 10" x 2', set at 50°, containing a lamp (pl. LV, fig. 213): the Syriac inscription *no.* 35 and the inscription *no.* 40 were near this spot, impressed in the cement. The drains from the earlier floors (5th–6th? at +7' 0") were represented by two pot-pipes, one fitting into the other, with fall to E.: the later (2nd) are marked κ^1 , κ^2 , κ^3 , κ^4 on the plan, κ^2 consisting of four pot-sections, each being jars about 3' 8" long, the pointed bottom of the one fitting into the mouth of the other, the third one from N. being marked with a cross $\boxtimes$ in black paint. The fall was about 1' to N. κ^3 , six pot-cylinders, probably once seven, each about 11".

The dating is indicated by (*a*) the Syriac inscription in plaster (*no.* 35), and also by the green glazed pottery (pl. LVI, 'xxiv, 3') and by (*b*) the glazed pottery similar to the material from Samarra (ninth–thirteenth centuries). For the burials, see p. 110.

(D) THE CHIEF FINDS DURING 1927–8

1. *Prisms* from *SH* (see p. 103 and *CEN* 83). Sennacherib to Ashurbanipal.
2. *Prism* of Ashurbanipal (see p. 106 and *CEN* 76).
3. Numerous fragments of cuneiform *tablets*.
4. Fourteen fragments of *zigâti* (*nos.* 122 B–L and O–Q).
5. One piece of minutely written *tablet* from Ashurnasirpal's palace (*no.* 122 A).
6. *Pottery* (see p. 135).
7. *Limestone objects*: shrine,¹ some distance above latest Assyrian level, xv, c: censer (?), xxiv, 6 (*no.* 335): column-base, xli, 5: niche (xxvii) 2' 6" x 1' 3½" x 1' 0", with red paint (apparently) on back: bath or trough, in two pieces, xvii, 7, outside 3' 6" x 2' 2", depth inside 1' 8½", outside about 2': trough, viii, b, 8, 1' 10" x 1' 10" x 9" (6" deep inside): block with depression in top surface, and small runnel therefrom (religious use?), 2' 9" x 2' 2" x 1' 8" high, depression 1' 4½" wide, runnel 3" deep, from first building, 2' SW. of long + 12' wall, xix, c, 3: mace-head, i, 8 (*no.* 304). For the stone inscriptions see pls. xli ff.

¹ For the form, cf. the so-called 'shrine-stones' of Tanit, found in the early Punic levels at Carthage (see Harden, *Am. Journ. Archaeology* 1927, 297).

8. *Furnaces, or pot-ovens*: (1) IV, 2', circular pot-oven, falling to pieces; height 10", diam. 18", thickness $\frac{7}{8}$ ". (2) VI, 2', similar, diam. 18", with hole for observation. (3) VI, 5, two similar; (a) height now 7", inner diam. 2' 2", thickness of pot 1"; no bottom; ashes at base: (b) built on level of floor near; diam. 1' 8". (4) LXXXVII, 5, similar, diam. 1' 10".

9. *Sculpture*: (1) Numerous pieces of the scene of Ashurnasirpal attacked by a lion and his thanks for his sport (pl. LIX, 4: *CEN*, pls. VI, VII); (2) Sennacherib's campaign in the Marshes (pl. LVIII, 6); (3) two pieces of reliefs of tutelary deities; (4) four pieces of carved pavement, filched from Ashurbanipal's palace (one from '2' 5"' wall, and another xv, 9); (5) fragment of horse's hoof with mountains (from small base at SW. gate); (6) fragment of soldier marching on mountains with dwarf oak; (7) piece of winged figure; (8) fragment of palm tree; (9) relief of lion's claw (probably Ashurbanipal), E. pavement (x-xii, o' 7" or 2' 5"); (10) reeds (Sennacherib) (VIII-IX, + 2' 5" wall, west).

Statue: rough marble head and torso of uncertain date, about life-size, found as part of the building in the wall-base at the SW. gate.

Small relief (no. 338; cf. Nassouhi, *RA.* xxii, 17).

Small squatting figure, archaic, alabaster, XVIII, B, 15, no. 334.

10. *Bronze*: see pl. LVI.

11. *Glass*: see pl. LVI.

12. Ivory object inscribed, as Dr. A. E. Cowley, the Keeper of the Bodleian Library, has suggested, perhaps in Sassanian (no. 343).

13. Steatite plaque incised with scene (of bull?) and inscription or monogram (no. 339).

14. *Bricks*. *The numbers refer to the text in the plates*. Not necessarily from the temple-site. One class of baked bricks, from Ashurnasirpal to Sennacherib, appears constant in size:

Ashurnasirpal, 1' $1\frac{1}{2}$ " $\times$ 1' $1\frac{1}{2}$ " $\times$ $4\frac{1}{2}$ " (no. 61).

Sargon (well), 1' 1" $\times$ 1' 1" $\times$ 5"; 1' 1" $\times$ 1' 1" $\times$ $4\frac{3}{4}$ " (two): 1' 0" $\times$ $5\frac{3}{4}$ " $\times$ 5" and 1' 1" $\times$ $6\frac{1}{2}$ " $\times$ $4\frac{3}{4}$ " (headers) (no. 70); and one from 'Ain Sefna 1' $2\frac{1}{4}$ " $\times$ $6\frac{1}{4}$ " $\times$ $4\frac{3}{4}$ " (no. 72).

Sennacherib, 1' 1" $\times$ 1' $1\frac{1}{2}$ " $\times$ 4" (see no. 82): 1' 0" $\times$? $\times$ $3\frac{1}{2}$ " (see no. 82): 1' $1\frac{1}{2}$ " $\times$? $\times$ $4\frac{1}{4}$ " (no. 82): 1' $1\frac{3}{4}$ " $\times$ 1' $1\frac{3}{4}$ " $\times$ $3\frac{3}{8}$ " (no. 85).

So many of the bricks are broken that the only size-datum available is the thickness:

Tiglath-Pileser, $2\frac{1}{4}$ " to $2\frac{3}{4}$ " (nos. 53 ff.).

Ashurnasirpal, $1\frac{5}{8}$ " to $4\frac{3}{8}$ " (see pl. XLIV).

Shamshi-Adad, 3" to 5" (nos. 114 ff.).

Adad-nirari, 3" to $4\frac{3}{8}$ " (nos. 66 ff.).

Sargon, $2\frac{1}{4}$ " to $4\frac{5}{8}$ " (nos. 69 ff.).

Sennacherib, $2\frac{1}{2}$ " to 5" (nos. 76 ff.).

Numerous bricks shaped in angles or with curved sides were found near Ashurnasirpal's palace. Note also the eight plano-convex with finger holes (11" $\times$ 11" $\times$ $2\frac{1}{2}$ " from LXXXV (+ 3' 4"). Unburnt late Assyrian bricks measured 1' 2" $\times$ 1' 2" $\times$ $4\frac{1}{2}$ " from VII, and 1' 1" $\times$ 1' 1" $\times$ 5" from platform near Sargon's pavement.¹

¹ Here, for want of a better place, should be mentioned that we were shown two small plaques—one in gold, the other in lead—incribed with a text of Ashurnasirpal, indicating that he had decorated the palace of the city Apki for his abode. I will not discuss the text further, as it would trench too far on the possessor's rights, but they were said to come from between Tel Afar and the Sinjar Hills.

(E) GRAVES

1. *Built Graves.*¹

(a) Level +2, xxxv (9" deep in Assy, *libn* floor): grave (7' 4" × 2' 5") built of squared stones, four on end each side, one at each end, two still covering top: cement between them and on floor. One of the stones is a perfect slab inscribed with Ashurbanipal's inscription (no. 44). Size of one stone 1' 7" × 1' 3" × 5½". Bones scattered: 303°.

(b) Level +3, xxxiv (9' from surface): two graves side by side, the one to W. was under 2' of solid rubble and cement, which shows that it was earlier than the immense cement masses here. Walls of small stones and cement (6' 2" inside × 2' 3" outside): skeleton much destroyed, body full length on left side, head to NW. 309°. The other to E., 10" distant from first at SE. end, 3" lower, skeleton also on left side, head to NW: 320°. Associated with pottery like that of Third Cement building.

(c) Level approx. 4', xxix: built grave 6' 7" × 1' 9½" × 2' deep. Lined with blocks of limestone, and evidently originally plastered. Plaster rim round edge, and one line of limestone slabs and bricks above. No skeleton. 315°.

2. *Larnax Burials, etc.*

(d) Level +3' 6", xxii (10' deep, 5' below Second Cement): pot-'bath', 3' 6" × 1' 10" outside measurement. Only a few bones and part of a lamp. 295°. Perhaps Parthian.

(e) Level 5' 3", xx, c (7' deep): pot-'bath', broken at W. end (3' 3" outside × 1' 6½": ext. height 1' 6"). Body with legs bent lying on right side, head to NE. 40°. The cut in the Second Cement floor shows definitely that this is subsequent to this building.

(f) Sennacherib's House (see *CEN* 84, 87, and 108 for Mr. Dudley Buxton's note on the Armenoid character of the skull): pot-'bath', 8' down, just below a similar (empty) *larnax*-burial. Skeleton on right side, huddled up, head to NE. 67°. Bronze cup with it (no. 300). Perhaps ninth century B. C.²

(g) Level +8, Fifth Cement floor. Jar-burial, containing skeleton. It had apparently been let into the cement.

3. *Various Graves.*

(h) Level +3' 0", xl. Skeleton laid on its back, perhaps wrapped, probably of a woman, on the Assy. *libn* flooring: grave made of *libn* walling with two Assyrian bricks on top, about 6' × 1'. Head to NW. 305°.

¹ Rassam 'discovered at Kouyunjik several tombs built of slabs of stone . . . in one of them, I understand, was found a gold coin of the Emperor Maximinus. They contained, however, very interesting relics in the same precious metal and in glass. In one of them was a thin gold mask, still preserved, which perfectly retained the features of the corpse' (*Layard, Nin. and Bab.*, 592).

² We are inclined to think that the frequent occurrence of these *larnax*-coffins in use at all depths, and apparently in use in Assyrian times (*f*), as well as after the Second Cement building (*e*), i.e. fourteenth century or later, A. D., shows that these coffins, which perhaps represent the common Assyrian method of burial, were dug up by later inhabitants and reused.

TEMPLE OF NABŪ AT NINEVEH

III

(i) LX, about 3' 0" deep, skeleton laid on right side, apparently loosely covered with rough stone slabs. Head to NW.

(j) Level + 6', XXII, B. Skeleton laid on left side, head to N.

(k) Level + 4' 6", XXIX, 3' 9" below Second Cement floor. Rough grave made of old bricks and stones, with brick floor, approx. 6' x 1'. Three iron nails came from it.

(F) THE GATES OF NINEVEH

As will be seen from *CEN* 127, we remapped the site partly on account of the gates in the ramparts, and partly because of an error which had crept in in regard to the fortifications (*CEN* 129: see pl. LXI). L. W. King (*Suppt. to the Catalogue of Cun. Tablets*, xix) went very fully into the literary matter of the Gates, and correctly suggested as a possibility for the Gate of Ashur the larger of the two breaks in the S. wall. From two prisms of Sennacherib, one written in Ab, 694 B. C., and the other, Marcheswan, 696 B. C., it would appear that Sennacherib increased the number of gates in the Inner Rampart from fourteen to fifteen, changed the title of one, and entirely renamed another. The Assyrian king fortunately is precise in his description, giving them in both their order and their orientation. Taking them in their order in 696 B. C.:

(A) 'South and East'.

(a) GATE OF ASHUR, doubtless leading to the City of Ashur, and King's suggestion is probably correct (cf. also Rich, *Koordistan*, ii, 40). It is the larger of the two openings in the SE. wall, 20-30 yards wide, the walls being still 50' above the road. A dry wady in front shows how this wall must have been protected by the addition of running water, and the road appears to have passed what was once a suburb marked by rising ground covered by potsherds, etc. and noted by Rich (*loc. cit.*; cf. *CEN* 20).

(b) THE HALZI GATE, for which there are two possibilities: (a) a well-marked opening in the SE. wall 200 yards E. of the Ashur Gate: (b) an ill-marked dip in the high NE. walling some 400 yards N. of the E. corner. (a) is well defined, with its walls still 40' high, but against it is the fact that it is very near the Ashur Gate: (b), on the other hand, is set very high in a high wall with an ill-defined gap.

(c) THE SHAMASH GATE, of which there is no doubt. It is the best-marked gate in the walls, being marked by two high peaks close together in the NE. wall, and the gap (10 yards wide) is still used. The wall is about 50' above the roadway, and the *libn* walling is still showing. It was excavated by Layard (*Nineveh and its Remains*, i, 123), who found it panelled with alabaster slabs.

(d) THE NINLIL GATE, the gap to the S. of the Khosr, through which the little river runs through the walls. The present road passes to the south and probably marks the old road (see pl. LIX, fig. 5 and *CEN*, pl. III).

(e) THE MUSHLAL GATE. The word *mušlalu*, often used in building-inscriptions, appears to mean a wall buttressed as a stairway (see Luckenbill, *Anc. Rec.*, pars. 30, 49, 77-9, 124, 678, and vol. ii, 397, 468, and 725, in which two latter examples the *mušlalu* is built of limestone blocks), and its position and appearance suggest a river-wall built in steps, perhaps connected with *سَلَم*, *pl. سَلَام*, and *سَلَام* 'ladder'. We shall discuss on p. 114 the great dam a little higher up at Ajilah, which we have identified with Assyrian work, one possibility being that this dam is the *mušlalu* indicated. But the objection here is that the obvious gate which should lead to this dam is the next one, the Shibaniba Gate, and if, therefore, the two small alternative gaps in the wall which suggest themselves for the Mushlal Gate, about 500-700 yards N. of the Khosr gap, are not accepted, it may be that the *mušlalu* either refers to what may be a very crude old dam represented about a mile below Ajilah by large masses of conglomerate, or more probably by the masonry which was still standing at the Ninlil Gate in 1905 (mentioned also by Rich, *loc. cit.* 39) and, in this last case, the Mushlal Gate would then be in the same gap as the Ninlil Gate, but on the N. bank of the river.

The title given to this gate, 'That which causes the flesh of the *ašakku*-sickness to go forth', was explained by King as indicating that it was a Leper's Gate. It is quite reasonable to suppose that there may have been a sulphurous or bituminous spring in the neighbourhood, as at Hammam Ali and 'Ain Sufra (cf. George Smith, *Assyrian Discoveries*, 94, 95).

(f) THE SHIBANIBA GATE, i.e. leading to the place of that name. The gap is well marked and the present road through it leads to a ford below the lower dam at Ajilah.

(g) THE HALAḤḤI GATE, which fits the last gap in the NE. wall, still being used for a road.

(B) 'North'.

(h) THE ADAD GATE, either a poor gap about 500 yards from the N. corner, or to be set less probably in the broader gap 500 yards farther on. The former appears to have been close to a tower on the walls, and if this really was the gate, the road outside would have had to cross a steepish wady, usually dry, the spring-head of which is only a few hundred yards distant in this saddle outside the walls.

(i) THE NERGAL GATE, the great gate in the NW. wall excavated by Layard (*Nineveh and Babylon*, 120), wherein he found colossal bulls and limestone pavements, the latter still marked by chariot-wheels. This gate leads towards Tarbiş (Sherif Khan). It is still marked by a high cone, but the sculptures, some of which were still here in 1905, have been taken away (see King, *Cun. Texts*, xxvi, 20).

(j) THE SIN GATE, the gate of the New Moon, the most probable identification being a gap some 200 yards NE. of the W. corner of the walls, but a narrow gate without any distinction. It is worth notice that Kouyunjik lies midway between the Shamash Gate and the Sin Gate, the presumption being that an observer on Kouyunjik could mark at some period of the year the sunrise and crescent moon over these gates.

(c) 'West'.

(k) THE GATE OF THE WATERING PLACES, the most likely place being just under the W. corner of Kouyunjik, where the broad, shallow channel of an old watercourse marks the Tebiltu which washed this flank of the mound, doubtless where the animals were watered. It is 150 yards broad, and is thus far more likely than the little gap 200 yards to the NW.

(l) THE QUAY GATE, obviously another water-gate, in the gap at the SW. end of Kouyunjik by the Khosr, doubtless on the right bank to allow entry to Sennacherib's palace. As will be seen, the next gate, that on the other side of the Khosr, was added in 694 B. C., which would rather indicate the lack of a gate on the left bank.

(m) THE DESERT GATE, made after 696 B. C., the gap some 200 yards SE. of the present Khosr bridge, through which a road still passes.

(n) THE ARMOURY GATE, naturally the gate under Nebi Yunus, where the Armoury was. It is a broad gate with a road leading under the N. slope of Nebi Yunus to the Shamash Gate.

(o) THE HANDÛRI GATE, an obvious gate in the SW. wall, but one of little distinction, about 500 yards SE. of Nebi Yunus. *Handûri* is a difficult word, with which ܡܕܢܐ, either 'beggar' or 'pot', might be associated. 'Beggars' Gate' is unlikely here, as beggars would sit in the largest thoroughfares: 'Gate of Pots' is more likely, either because the potters had their quarter here, or because it represents the origin of the tradition noted by Rich (*loc. cit.*, ii, 62) that Yarimjah, a mound and village about two and a half miles to the south of this gate, was considered to have been the 'Pottery' of Nineveh.

(G) THE AGAMMU (POOL OR RESERVOIR) OF SENNACHERIB ON THE KHOSR

In *CEN* 129 we discussed the waterworks which Sennacherib built for his city, and on pp. 130-1 we described an ancient double dam in the Ajilah gorge, some two miles NE. of Kouyunjik, which appears never to have attracted more attention than a mere passing reference to it as a 'dam' or 'mill dam' on the maps, as though it were of modern construction. But it struck us as obviously Assyrian work of a good period, and we think we can make out a case to have discovered the *agammu* of Sennacherib. After his description of his damming of the upper waters of the Khosr, he says: 'To assuage the flow of these waters I made an *agammu* (pool or reservoir) and set out a marsh within it: I loosed therein storks, wild swine, and pelicans.' This, as he goes on to say, made everything luxuriant, the vine, almond, cypress, and mulberry thriving, while in the thickets the storks nested and the wild swine multiplied.

Ajilah lies perched on the right bank of the Khosr on a bluff about two miles NE. of Kouyunjik. At this point the Khosr, here about 30 yards wide, exchanges its low undulating terrain for a defile between two steep heights, 80' on the W. and 120' on the E. respectively. The E. hill of conglomerate and reddish clay marks the N. end of the outer rampart, natural, it is true, but forming a slightly 'refused' flank.

In this defile is a magnificent double dam. That it is of Assyrian workmanship will be obvious from a comparison with the photograph (pl. LVIII, fig. 1) of the Assyrian walling at the base of Qal'ah Sherghat. Here are two massive river-walls, the upper about 150 yards upstream of Ajilah, the lower 250 yards below it, the river now passing unfettered through both.

Of the upper there remain three segments in or near the right bank, and a few ponderous masses up the hill-side. One segment lies broken off, at right angles to the stream, and this with the other two once formed a solid wall of roughly shaped blocks of limestone, sandstone, or conglomerate, firmly mortared together and built in at least five courses stepwise on the river-side and sheer on the bank-side, 5' 3" wide at the top and 8' 6" at the base at the NW. end, the height of the top above the water-level on 1st January 1928 being 4' 6". At the SE. end the width is 9' 6". The left bank opposite is some 20' to 25' high, of mud, full of martins' holes, and sheer almost to the water. Probably the original dam-gate or sluice was on this side, as there are certainly apparent remains of artificially cut stones, or, at all events, masses of conglomerate. Four hundred yards downstream of this is the second and far more imposing wall stretching diagonally across the river downstream from the left bank, but now, like the upper, without anything in the nature of a sluice-gate or dam to link it right

across. The total length is about 250 yards: the height at one point is 9' 6" outside, above the water which flowed past it, and inside, 8' above the bank-level. The lower part is curved against the flow, as is natural, in two salients,



Fig. 1. The Agammu Pool.

to meet the thrust of the water. Taken in detail it is not impossible that the upper end on the left bank may show the trace of repairs with cemented lumps of stone, perhaps of a later date, but downstream of this come two portions of walling definitely Assyrian (as will at once again be seen from a comparison with the Qal'ah Sherghat photograph), the step-work being on the inner side towards the left bank, the crest (still Assyrian) being of mortared rubble. Then still farther downstream is a section with both outer and inner side built step-wise, and then again a section stepped only on the inside and sheer on the water-face. Various stone blocks measured 2' 1" x 2' 0": 1' 5" x 1' 1": 1' 4" x 11 $\frac{3}{4}$ ":

1' 4" × 9", while the thicknesses of two blocks were 1' 3" and 1' 0". On the water-side, below the water-line, the wall was built of rubble.

Presumably the upper wall is to reinforce the lower by acting as an additional dam to a further supply of water above. The evidence would point to this undoubted Assyrian dam being the *agammu* of Sennacherib, by which he secured the irrigation of the fields which intervened between here and the heart of Nineveh, the alternative being, as we have already discussed on p. 112, that this dam represents the *mušlalu* (stepped river-wall) to which the Mushlal Gate led. But it is also possible that this *mušlalu* was the river-wall at the Ninlil Gate.

(H) OTHER MOUNDS NEAR NINEVEH

A. *No. 1 mound* (Hashamîyah) *on the right bank of the Khosr, about one mile above Hashamîyah* (not shown on Felix Jones's map). Position by magnetic compass: to Ḥalahḥi Gate 197°: Minaret of Nebi Yunus 187°: highest point above dam (at Ajilah) 163°: Hashamîyah 158°. Not more than 1½ miles from the Ḥalahḥi Gate. It is a small conical mound about 60' high and 30 yards in diameter.

This settlement seems to have been occupied only during the prehistoric period. We picked up blades of flint chert and obsidian together with some fine, hand-made, painted sherds resembling the finer examples from Kouyunjik, one or two coarse red unpainted ones, and buff sherds with striations (see pl. LX).

B. *No. 2 mound* (Abbasîyah), *half an hour from No. 1 (which lies at 191° E. of N. from it)*. Position: Highest point above dam 179°: Minaret of Nebi Yunus 188°: Shibaniba Gate 193°. Right bank of Khosr. Width of mound 80 yards. The ancient Assyrian village lay to SE. on the flat. The summit was about 70' above the river, the lower half being probably natural, since the prehistoric sherds occurred at a height of 30' above the water. The painted sherds were much coarser than those from no. 1 mound and there was only one chert implement. The Assyrian site to the SE. was covered by a thick medieval deposit.

C. *No. 3 mound* (Gintarah). Position: Great Minaret, Mosul, 232°: Shibaniba Gate 234¾°: N. end of inner rampart of Nineveh, 244¼°, on dry wady, two miles from outer wall of Nineveh, 100 yards long, 60' high. Remains of occupation visible on flats near: one burnt brick found. On the mound itself fine painted and coarse red and buff sherds (as in no. 1 mound), with flint and obsidian blades, and a few later sherds (probably Assyrian). On the far side of the wady bounding the mound on the N. were flint and obsidian blades, one rather coarse painted sherd with hour-glass ornament, some plain buff and

black ware (uncertain date), part of a saddle-quern, and some late green-glazed ware.

D. *Yarimjah*. A high mound about $3\frac{1}{4}$ miles to the south of Kouyunjik, past which the Tigris at one time flowed, leaving much of one side now exposed, so that the different strata of occupation from prehistoric times are clearly visible. We took out some obsidian flakes from the lower levels, as well as some chert flaked in the manner of flint, and in the strata and on the ground near were potsherds both painted and plain prehistoric, and one which might be Assyrian.

(I) INSCRIPTIONS

(1) Stone

No. 1. Inscription of Tukulti-Ninurta II (890-884 B.C.) on a limestone slab ($3' 2'' \times 3' 2\frac{1}{2}'' \times 10''$) found in the palace of Ashurnasirpal (XVIII, c, 24). In later times it had been cut down and the back hollowed as a trough $6\frac{3}{4}''$ deep. The phraseology is much like that of Ashurnasirpal.

(1) [^m *Tukulti-ilu Ninurta šar kiššati šar mātu Aššuri*] *apil Adad-nirari šar kiššati šar mātu Aššuri* *apil Aššur-dan(an) šar kiššati šar mātu Aššuri-ma* (2) ¹ . . . *gi* ^m (?) -*ri-ša šarru ša ištu* (sic) *bir-ta-an nāru Diklat a-di mātu Hat-te* (3) [^{ma} *La-ki-e ana si-ḥir-ti*]-*ša mâtâtî Na-i-ri-a-na paṭ gim-ri-ša mātu Su-ḥi a-di* (4) [^{alu} *Ra-pi-ki ištu mātu ni-riḫ*] *mātu Kir-ru-ri a-di mātu Gil-za-a-ni m A-pa-a* ² *šar alu Hu-ub-uš-ki-a* (5) . . . [*kaṭ-su i*]-*s-bat ištu ni-ri-be ša mātu Ba-bi-te a-di* (6) [^{ma} *Haš-mar mātu Za-mu-a ana*] *si-ḥir-ti-ša ištu nāru Za-ba šaplita(ta)* (7) [*a-di alu Til-ba-a-ri ša*] *el-la-an Za-ban mātu Hi-ri-mu mātu Ha-ru-tu* (8) [^{ma} *bi-ra-a-te ša mātu Kar*]-*du-ni-aš ištu alu Šu-ši* ³ *ša eli nāru Diklat a-di* (9) . . . [*ištu alu*] *Dur-Ku-ri-gal-zi a-di alu Si-bur ša ilu Ša-maš alu Si-bur* (10) [*ša ilu A-nu-ni-ti kaṭ-s*] *u ik-šu-du ša ekal-lim ša alu Ni-mit- m Tukulti-ilu Ninurta.* ⁴

(1) [Tukulti-Ninurta, king of multitudes, king of Assyria], son of Adad-nirari, king of multitudes, king of Assyria, son of Ashur-dan, king of multitudes, king of Assyria: (2) . . . [al]l (?) of it (?): the king who from across the Tigris as far as the land of Hatte; (3) [the land of Lakê throughout] its [whole extent]; the lands of Nairi in their length and breadth; the land of Suḥi as far as (4) [the city of Rapiḫ; from the pass of] the land of Kurruri as far as the land of Gilzâni; Apâ, the king of Hubushkia (5) . . . [his hand cap]tured (?); from the pass of the land of Babite as far as (6) [the land of Hashmar; the land of Zamua throughout] its whole extent; from the lower Zab (7) [as far as Til-bâri which] is above Zaban; the lands of Ḥirimu (and) Ḥarutu (8) [the fortresses of the land of Kar]duniash; from the city of Šuši which is on the Tigris as far as (9) . . . ; [from] Dur-Kurigalzu as far as Sippar of Shamash

¹ From the evidence of ll. 1 and 7 there are about eight characters missing at the beginning of lines throughout.

² A new name.

³ For Ašūši (see Scheil, *Annales de Tukulti-Ninip II*), where the king lost his way in the 'woods' for three days before he came to Dur-Kurigalzu.

⁴ Possibly no. 19 is a duplicate of ll. 1-4: (1) *E*-[*kal m Tukulti-Ninurta, etc.*]; (2) *apil Aš-šur*-[*dan(an), etc.*]; (3) *gim-r* [*i*?, *etc.*]; (4) *a-na* [*si-ḥir-ti-ša, etc.*]; (5) *a-di* [^{lu} *Ra-pi-ki*] . . .

(and) Sippar (10) [of Anunitum] his [han]d captured. Belonging to the Palace of the City Nimit-Tukulti-Ninurta.

No. 2. Limestone slab from XXI, c, 10 (out of place, some 15' above Ashurnasirpal's palace).

(1) *^mAš-šur-našir-pal šarru dan-[nu]* . . . (2) *^{ilu}Bêl ša zik-ri-šu* . . . (3) *hur-ša-ni dan-[nu-ti]* . . . (4) *kat-su ik-[šu-ud]* . . . (5) *ilu* . . .

(1) Ashurnasirpal, the powerful king . . . (2) Bêl, who his name . . . (3) the mighty mountains . . . (4) his hand con[quered] . . .

No. 3. Limestone (LXXX, 9). Doubtless the inscription related to some large pieces of sculpture of the protecting demon raising his club, which were found in the debris, doubtless originally from Ashurnasirpal's palace. For a representation see pl. LIX, fig. 2, and probably the demon in the frontispiece of my *Devils*, vol. ii.

(1) *Na-ad-ru gab-šu sa-ak-pa an* . . . (2) *kîp-pu tar-šu ta-rid pa-ni* . . . (3) *la a-di-ru sak-* . . . (4) *lah-mu da'-* . . . (5) *kit (?)* . . .

(1) Fierce, powerful, overthrowing . . . (2) *Kîppu* stretching out, driving the front . . . (3) not fearing . . . (4) *lahmu* . . .

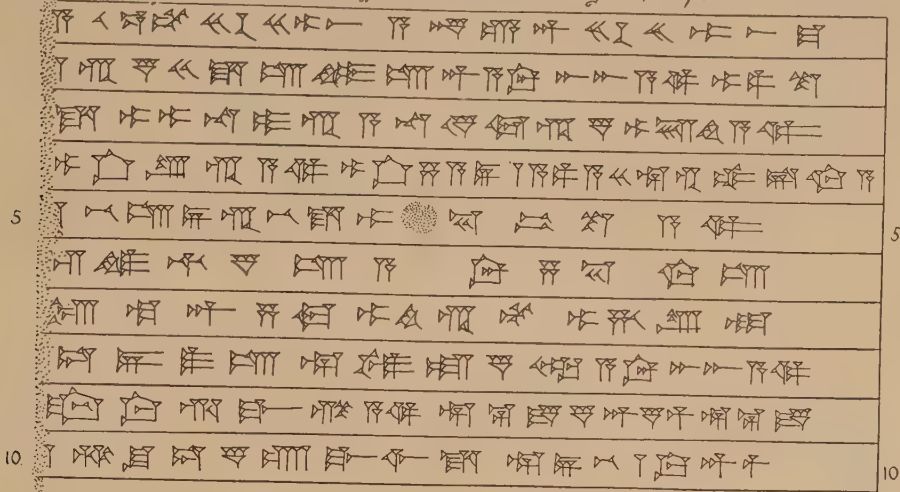
Nos. 4-10. Pieces of limestone inscription from various places on the temple site, forming fourteen lines horizontally between two sculptured scenes of Ashurnasirpal, the upper being the attack of the lion on his chariot, the lower his thanks for his safety (see pl. LIX, fig. 4, and *CEN*, pls. VI, VII). It probably records the restoration of the Temple of Ishtar (cf. l. 9, and see King, *Annals of the Kings*, 158). On the back, inscribed in the direction from the bottom to the top, is an inscription in large characters of a dedication to Nabu by an unknown king, probably Adad-nirari III (see no. 49). He has avoided the curse by not obliterating Ashurnasirpal's name, but certainly removed the slab.

(1) . . . *nakire^{pl}-š[u ana šepê^{pl}-šu] u-šik-[niš]* . . . *du-šu-ma* . . . *[tam]-du rabîtu(tu) kat-su i[kšud]* . . . (2) . . . *[p]a (?) -a . . . ni (?) ma (?) . . . na (?) pa ip (?) . . . ^{isu}kakka ^{isu}hatta-a u- . . . ' -na (?) . . . (3) . . . *hi ni . . . dan kal ma-li-ki šar-ḥu bêl bêlê^{pl}* . . . : *ka-liš ḥar-* . . . (4) . . . *i hi (?) . . . hi-il-la ul-ta- . . . [Aš-šur-našir-pal šar ^{mātu}Aš-šur apil Tukulti-Ninurta šar ^{mātu}Aš-šur apil Adad-nira[ri]* . . . (5) . . . *[š]a ištu e-bir-tan ^{n[aru]}[Za-ba šaplita(ta)]* (6) . . . *di ru ana ni- . . . [u] rapaštu(tu) mâtâti [Nairi]* (7) . . . *[ištu ni-ri-be ^{alu}Ba]-bi-te adi ^{alu}Hu-uš¹-mu-ri a-na nišê^{pl} [mâti-ia am-nu]* (8) . . . *bi-ra-te^{mātu} Kar¹-a[u]-ni-aš a-na mi-šir [mâti-ia u-tir]* (9) *[bît ^{ilu}Ištar bêlti]-a rabîtu(tu) ša šar¹-r[i] a-lik mahri-ia e-[pu-šu]* (10) . . . *[u]-tir-ri i-na mu-šab i[luti-ša]* (11) . . . *la (?) . . . bar bêl(adi) (?)¹ . . . [ki]-rib-šu aš-k[un]* (12) . . . *mu . . . u (?) bêlut-šu ina nap-ḥar . . . (13) . . . u be . . . [ša] šuma šad-ra i-p[a-aš-ši-tu-ma šum-šu i-ša-da-ru]* (14) . . . *ma-ru . . . ḥu-ša-ḥu.**

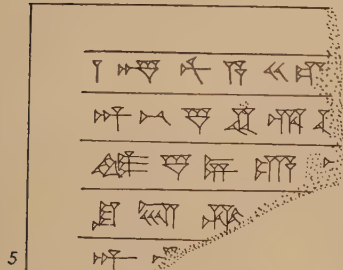
(1) . . . subdued his foes [to his feet] . . . and . . . the great [se]a his hand c[onquered] . . . (2) . . . weapon, sceptre . . . (3) . . . all princes, the glorious, the lord of lords . . . (4) . . . [Ashur-

¹ From no. 10, but not certain. Lines 11, 12 are a difficulty.

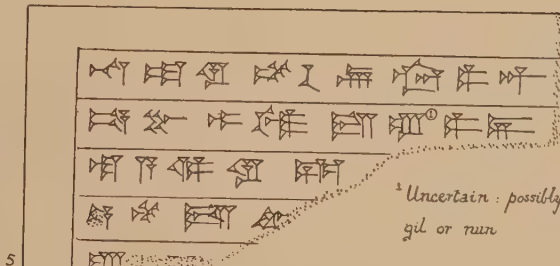
1. Inscription of Tukulti-Ninurta on limestone slab from XVIII,C,24 (the Palace of Ashurnasirpal).
in later times shaped and used as a trough: 3'2" X 3'2½" X 10" trough 6¾" deep.



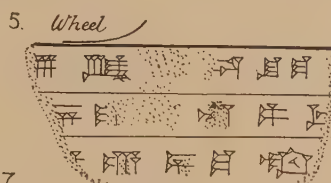
2. XXI,C,10 Limestone.



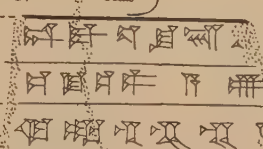
3. LXXX,9. Limestone



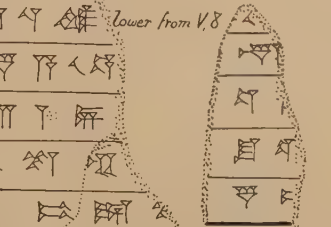
4. 5. Wheel



6. Claw



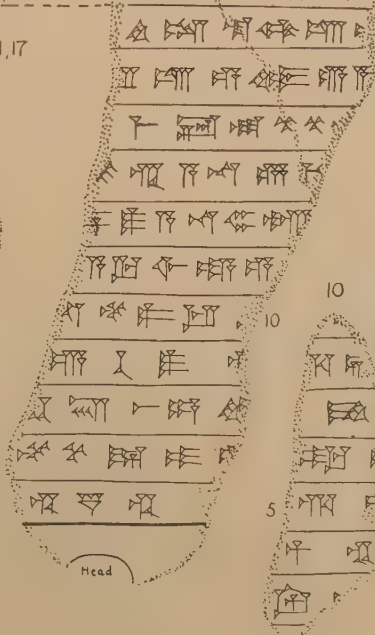
7. Upper part from XXVII,8. 8. XXVIII,17



9. XVIII,C,20



11. Basalt 8½" X 6" X 4½"

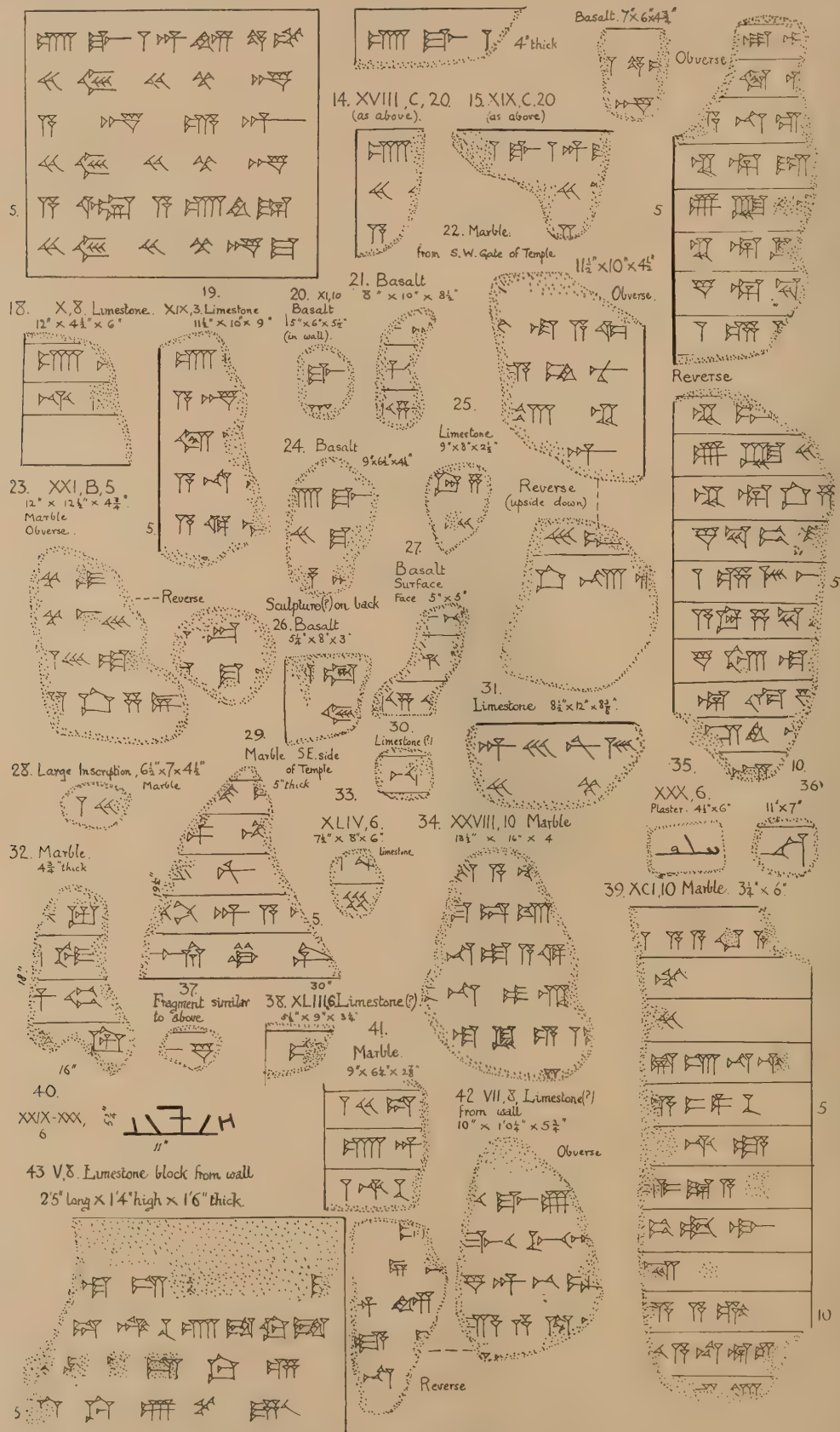


No. 4-10 from Sculpture of Ashurnasirpal (see CEN Plates VI-III).
On the reverse of several pieces runs an inscription in this direction → See Nos. 49-53.

Head facing right

Head

12. Basalt Slab. XIX, C, 20. 17"X16"X4". 13. Basalt Slab. XIX, C, 15. 16. XC, 9. 17. XX, C, 10. Limestone 13½"X21½"X4½"



TEMPLE OF NABŪ AT NINEVEH

119

naširpal, king of Assyria, son of Tukulti-Ninurta, king of] Assyria, son of Adad-nira[ri] . . . (5) . . . from the other side of the [Lower Zab] (6) . . . and the broad lands of [Nairi] (7) . . . [from the passes of Ba]bite as far as Hushmuri unto the people [of my land I counted] (8) . . . the fortresses of Karduniash to the borders [of my land I added]; (9) [the Temple of Ishtar] my great [lady] which the king(s) preceding me had bu[ilt] (10) . . . I restored, as a dwelling for [her divinity I made] (11) . . . therein I put. (12) [If any prince] . . . his lordship in all . . . (13) . . . [who] (my) written name shall [erase, shall write his own name] (14) . . . may famine [come upon him].

No. 11. Basalt, mentioning Ashur.

Nos. 12-16 (20?). One complete slab and four (perhaps five?) pieces of others, of Adad-nirari II (c. 911-891 B. C.), all found a few feet above the excavated chamber of the palace of Ashurnasirpal. A duplicate text exists on a cylindrical basalt object in the British Museum (King, *Annals*, 154).

(1) *Ekal^{m ilu} Adad-nirari* (2) *šar kiššati šar mâtu Aš-šur* (3) *apil Aš-šur-dan(an)* (4) *šar kiššati šar mâtu Aš-šur* (5) *apil Tukulti-apil-E-šar-ra* (6) *šar kiššati šar mâtu Aš-šur-ma*.

(1) Palace of Adad-nirari (2) the king of hosts, king of Assyria (3) son of Ashur-dan (4) the king of hosts, king of Assyria (5) son of Tiglath-Pileser (6) the king of hosts, king of Assyria.

No. 17. Ashurnasirpal (restored from several texts in King, *Annals*). Duplicate on both sides. About 15' above the excavated chamber of his palace.

(1) [*rapaštu*](*tu*) *mât[âti Na-i-ri]* (2) [*ana*] *paṭ gim-r[i-ša mâtu La-ki-e]* (3) *a-na si-[hir-ti-ša mâtu Su-ḫi]* (4) *adi^{alu} Ra-[pi-ki ana šepâ-šu]* (5) *u-šik-niṣ [ištu ni-rib ša^{mātu} Kir-ru-ri]* (6) *adi^{alu} Gil-[za-a-ni ištu ni-rib]* (7) *ša^{alu} Ba-[bi-te a-di mâtu Haš-mar]* (8) *ana niṣê^{pl} mât[ti-ia am-nu ištu e-bir-ta-an]* (9) *nâru Za-ba[šaplita(ta) a-di^{alu} Til-ba-a-ri]* (10) *ša el-la-[an^{mātu} Za-ban ištu]* (11) *alu Til-ša-[Za-ab-da-ni u^{alu} Til-ša-Ab-ta-ni]* (12) *alu Hi-r[i-mu^{alu} Ha-ru-tu]* (13) [*bi*]-*ra* (?) [*te* *ša^{mātu} Kar-du-ni-aš*], etc.

(1) The [broad] lands of [Nairi in their] (2) length and breadth; [the land of Laḫê] (3) throughout [its] whole extent; [the land of Suḫi] (4) as far as the city of Ra[piḫi unto his feet] (5) he subdued. [From the pass of the land of Kirruri] (6) as far as the city of Gil[zâni; from the pass] (7) of the city Ba[bite as far as the land of Hushmar]; (8) as the peoples of [my] land [I reckoned. From across] (9) the [lower] Zab [as far as the city of Til-bâri] (10) which is above [Zaban, from] (11) the city of Til-sha-[Zabdan] as far as the city of Til-sha-Abtani] (12) the cities Hir[imu (and) Harutu] (13) the fortresses [of the land of Karduniash], etc.¹

No. 29. Presumably duplicate of no. 69.

No. 31. Sennacherib.

¹ Restore the text of obverse no. 22, ll. 3-4, a marble inscription probably of Ashurnasirpal, from ll. 7-8, and ll. 4-5 probably from ll. 8-9. Reverse, from ll. 8 and 5. Restore no. 23, obverse, ll. 3-4 from ll. 8, 9, but ll. 1, 2 are uncertain: reverse, from l. 9 (?), and for l. 2 read [*ik*]-*šu*-[*uṣ*]? No. 25 mentions *nâru Za-ba*.

THE EXCAVATIONS ON THE

No. 32. Mentions Marduk, i. e. the Temple of Nabû and Marduk.

No. 34. Text of Ashurnasirpal.

(1) . . . *te* (?) *a-na* . . . (2) [*kat-su ik* ?] *-šu-du ištu riš* [*e-ni*] (3) [*nâru Su-ub*] *-na-at a-di* [*ni-rib ša bi-ta-ni* : *rapšâti mââtâ*] *ti Na-i-ri* [*ana paṭ*] (4) *gim-ri-ša* ^{*mātu*} [*La-ki-e ana s*] [*i-hir-ti-ša*], etc.

[his hand] captured (?) ; [from the source of the river Sub]nat as far as [the pass which lieth over against it], etc.

No. 39. Uncertain.

(1) . . . *a-a-ki a* . . . (2) . . . *-mu* (3) . . . *-niš* (?) (4) . . . *uš-ta-na-bal* (?) (5) . . . *e-taṭ-pa-šu* (6) . . . *-ti-ia* (7) . . . *u-ra-a* . . . (8) . . . [*lib* (?)] *-bi zaḫ-pu* (9) . . . *su* . . . (10) . . . *-ia a-duk* (11) . . . *u a-na* ^{*alu*}

Only a few words intelligible : (4) 'I caused to bring' (5) 'I made' (8) 'planted [in the mid]st (?)' (10) '[with] my [weapon ?] I slew'.

No. 41. Sargon's dedication to the temple (cf. no. 69).

No. 42. Uncertain. Inscribed on both sides.

(1) . . . [*šar*] *ru rabû(u)* . . . (2) . . . *rabû(u)* ? . . . (3) . . . *šakni* ^{*ilu*} *Bêl šangu* [^{*ilu*} *Aš-šur*] (4) . . . *dan apil* (?) . . .

No. 43. Sennacherib (?).

(2) . . . *la iš-* . . . *ma* (?) (3) [*a-na*] *kêni palû-šu Bit-A-ki-it* (4) . . . *iš-ku-un* (5) . . . *-ku u-še-piš*.

. . . not . . . for the security of his reign the Temple of the New Year's Feast . . . he settled . . . he caused to make.

It is Sennacherib who on K. 1356 (a tablet from Nineveh) relates how he built the Temple of the New Year's Feast, of which 'the cult had been forgotten since days of old' (see Luckenbill, *Sennacherib*, 139; Pallis, *The Babylonian Akitu Festival*, 260). This block was found in the base of a wall (+0' 7") which was near another wall containing a piece of Sennacherib's sculpture (+2' 5").

No. 44. Ashurbanipal. Limestone paving slabs, of which about eighty were found complete ; from these and from the pieces it may be calculated that there were originally about four hundred. These were laid face down in his pavements. The inscription has long been known, having been published in Layard, *Inscriptions*, pl. 85, and S. A. Smith, *Keils. Asurb.*, i, 112. Translated in Luckenbill, *Anc. Rec.*, ii, 383.

(1) ¹ *A-na* ¹ ^{*ilu*} *Nabû bêlu šîru a-šib E-zi-da* (2) *ša* ² *ki-rib* ² *Ninua* ^{*ki*} *bêli-šu* ^{*m*} ^{*ilu*} *Aššur-bani-pal šar* ^{*mātu*} *Aššuri* ³ (3) *i-riš-ti hi-šiḫ-ti ilu-ti-šu rabî-ti* ⁴ (4) *ša ina ša-kan tēmi* ⁻ *-šu u nadan ur-ti-šu kabit-ti* ⁴ (5) *ina mit-ḫu-ši* ⁵ *abikti akkis(u) ḫaḫḫad* ^{*m*} *Te-un-man* (6) *šar* ^{*mātu*} *Flamti* ^{*ki*}

¹⁻¹ V. *ana*.

²⁻² V. *lib*.

³ V. ^{*mātu ilu*} *Aššuri*.

⁴ V. *tu*.

⁵ *KU=SAI*. 7982, and CT. xxxv, 4.

⁶ V. *uṣ*.

TEMPLE OF NABŪ AT NINEVEH

121

u^m *Um-man-i-gaš*^m *Tam-ma-ri-tu* (7) *Pa'-e*^m *Um-man-al-das*¹ *ša arki*^m *Te-um-man* (8) *iṣṣu*(*šu*) *šarru-ut*^{mātu} *Elamti*^{ki} *ina* *ḫi-bi-ti-šu* *rabī-ti*² (9) *ḫa-ti*³ *ik-šu-us*³ *-su-nu-ti-ma* (10) *ina*^{isu} *ša*⁴ *ša-da-di*⁴ *ru-kub* *šarru-(u)-ti-ia* (11) ⁵ *aš-mid*⁵ *-su-nu-ti u* *ina* *tukulti(ti)-šu* *rabī-ti*² (12) *ina* *kul-lat*⁶ *naḫ-ḫar*⁶ *mātātī*⁷ *aštakkanu(nu)* *si*⁸ *ma-a-ti*⁸ (13) *ina* *ūme(me)-šu* *kisal* *bīt*^{ilu} *Nabī* *bēli-ia* (14) *ina* *pi-i-li* *eš-ki* *ši-kit-ta-šu* *u-rab-bi* (15) ⁹ *a-na*⁹ ¹⁰ *ša-at*¹⁰ *-ti*^{ilu} *Nabū* *ḫa-diš* *naplis-ma* (16) *lim-ma-ḫir* *panu*¹¹ *uk-ka* *ina* *ti-kiṣ*¹² *sa-tak*¹² *ki-ka* (17) ¹³ *ki-e-ni*¹³ *ba-laṭ*¹⁴ *ūmē*¹⁴ *-ia* *arkūti*¹⁴ *li-ša-a* (18) *šap-tuk*¹⁵ *ka*¹⁵ *i-tal-lu-ku*¹⁵ *E-zi-da* (19) *ina* *maḫar*¹⁷ *ilu-(u)-ti-ka* *li-lab-bi-ra* *šepā*¹⁷ *-a-a*.

(1) Unto Nabû, the supreme lord, dwelling in E-zida (2) which is in the middle of Nineveh, his lord: Ashurbanipal, king of Assyria, (3) the one sought after and desired by his great divinity, (4) who at the utterance of his behest and the giving of his weighty ordinance (5) in the shock of battle cut off the head of Teumman, (6) the king of Elam, and, as for Ummanigash, Tammarithu, (7) Pa'e, Ummanaldas, who after Teumman (8) ruled over Elam, by his great command (9) my hand captured them and (10) unto the wagon, the vehicle of my majesty, (11) I yoked them and by his great aid (12) throughout all lands I secured what was due to me. (13) In those days the court of the Temple of Nabû, my lord, (14) with solid limestone its area I enlarged. (15) For all time, O Nabû, look with joy (thereon), and (16) may it be pleasing unto thee by thy ruled line¹⁸ (17) the securing of a life of long days for me, (and) (18) may thine ordinance go forth that (19) my feet be long to tread E-zida before thy presence.

Nos. 45-6. Piece of four-sided basalt inscription. Subsequent to (?) Shamshi-Adad (V ? , 823-810 B.C.).

Face A (mutilated).

Face B. (1) . . . (2) *e-ḫu-šu* . . . (3) *i-na* . . . (4) *ar-ki* . . . (5) ^m *ilu* *Šamši*(*ši*)-^{ilu} *A[dad]* . . . (6) *šar*^{mātu} *Aš[ur]* . . . (7) *šarru a-lik* *p[a-ni-ia]* . . . (8) . . . *ma* (?) *ina* . . .

[The temple (?) of . . . which . . .] had built . . . in . . . after . . . Shamshi-Adad, the king of Assyria, the king going before [me] . . .

Face C (mutilated). *Face D*, uninscribed.

No. 48. Fragment of alabaster bowl, XXXIX, 4.

(1) . . . [^m *ilu* *Aš*]*šur-aḫi-iddin* . . . (2) . . . *-ti*^{mātu} *Ku* . . .

Esarhaddon's name, followed by an uncertain phrase which might possibly be [*ki-šit?*]-*ti*^{mātu} *Ku*-[*u-si*] 'spoil of Kush'. But doubtful.

No. 49. Inscription on the back of Ashurnasirpal's sculpture (see no. 4). Dedicatory inscription for the Temple of Nabû.

¹ V. *da-si*.

² V. *tu*.

³ V. *KUR*.

⁴ V. *GID.DA*.

⁵ V. *LAL*.

⁶ V. *NIGIN*.

⁷ V. *mātātī*¹⁴.

⁸ V. *mat, ma-a tu, ma-a-te*.

⁹ V. *ana*.

¹⁰ V. *šat*.

¹¹ V. *pa-nu*.

¹² V. *DIŠ*.

¹³ V. *DU*.

¹⁴ V. *ba-laṭ, TIL.LA*.

¹⁵ V. *uk*.

¹⁶ V. *GIN.GIN-ku, GIN.GIN-liḫ*.

¹⁷ V. *ma-ḫar*.

¹⁸ *Tikiṣ satakki-ka*, a difficult and uncertain phrase.

(2) Bricks.

Bricks of Tiglath-Pileser I (c. 1100 B. C.).

No. 53. XIX, C, 19. (1) *Ekal* ^m*Tu*[*kulti-apil-E-šar-ra*] (2) *šar kiššati* [*šar* ^{mātu}*Aššuri*].

Palace of Ti[glath-Pileser], king of multitudes, [king of Assyria].

No. 54, A (XL, 7) : 54, B (XXII, and XXII, 11).

No. 55 (XIX, C, 7 : and duplicate from debris).

(1) *Ekal* ^m*Tukulti-apil-E-šar-ra šarru dannu šar kiššati* [*šar* ^{mātu}*Aš-šur*] (2) *apil* *Aš-šur-riš-i-ši šarru dannu šar kiššati šar* ^{mātu}*Aš-šur apil Mu-tak-kil-* ^{ilu}*Nusku*] *šarru dannu šar kiššati* [*šar* ^{mātu}*Aš-šur-ma*] (3) *ša ki-šir-te nāri ik-šir* . . .

Palace of Tiglath-Pileser, the powerful king, king of multitudes, [king of Assyria], son of Ashur-rish-ishi, the powerful king, king of multitudes, king of Assyria, son of Mutakkil-[Nusku], the powerful king, king of multitudes, [king of Assyria], who hath knit the river-dam . . .

Bricks of Ashurnāšīrpal (883-859 B. C.).

(Composite texts from bricks, their provenance given on pl. XLIV).

No. 56.

(1) *Ekal* ^m¹*Aššur-našir-apli šar kiššati šar* ^{mātu}*Aššuri* (2) *apil* ^m¹*Tukulti-Ninurta šar kiššati šar* ^{mātu}*Aššuri apil* ^m¹*Adad-nirari* (3) *šar kiššati šar* ^{mātu}*Aššuri-ma bêt* ^{ilu}*Ištar* (4) *lib* ^{alu}*Ninua epuš-ma ar-šip*.

Palace of Ashurnāšīrpal, king of multitudes, king of Assyria, son of Tukulti-Ninurta, king of multitudes, king of Assyria, son of Adad-nirari, king of multitudes, king of Assyria ; I have made and built the Temple of Ishtar in the midst of Nineveh.

No. 57. This varies in l. 3 with *ša*, 'of', instead of 'in the midst of', and *ak-šir*, 'I have knit', instead of *aršip*. This restores King, *Annals*, p. 157.

No. 58. Lines 1 and 2 as ll. 1-3 above, to *ma*.² Line 3 *ša bêt na-at-ḥi ša* ^{alu}*Ni-nu-a*, 'Property of the *bêt-natḥi* of Nineveh'. As a possible suggestion *natḥi* might be referred to 𐎠𐎢𐏁, 'cut up in pieces', of meat of animals, etc., i.e. the place where the carcasses were cut up.

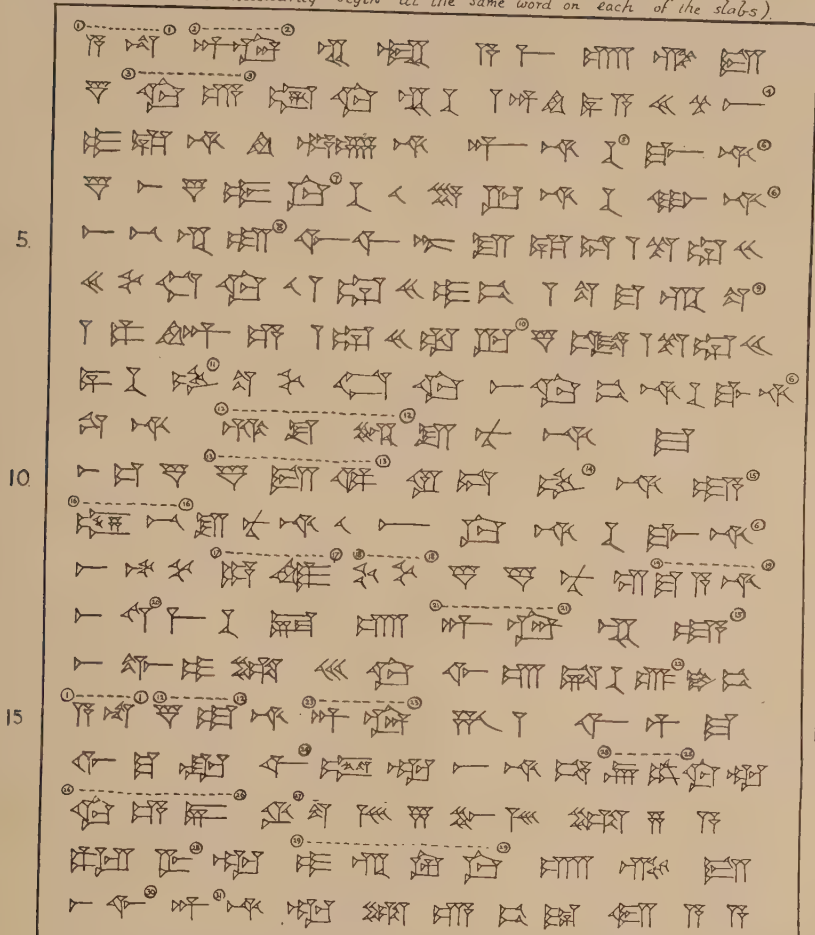
No. 59. Same as ll. 1-3 (to *-ma*) of above (King, *Annals*, 156).

No. 60. Same as above, without 'palace' in l. 1.

¹ Sometimes omitted.

² Variants l. 1, *dan-ni* for *kiššati*, l. 3, *na* for *nu*.

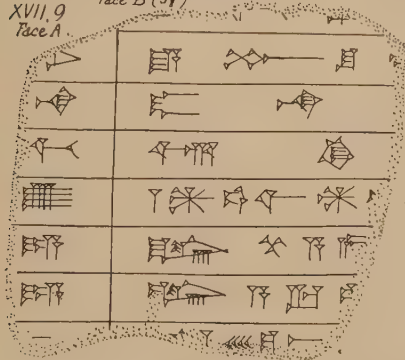
44. TEXT OF ASHURBANIPAL'S PAVING SLABS FROM THE TEMPLE
(The lines do not necessarily begin at the same word on each of the slabs).



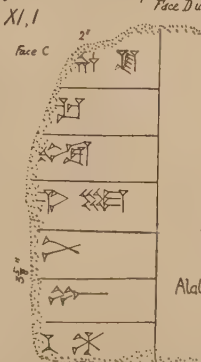
Variants :-

- ① 7. ② 10
- ③ 11 ④ 12
- ⑤ 13 ⑥ 14
- ⑦ Clear: one has 15
- ⑧ 16
- ⑨ 17
- ⑩ 18
- ⑪ 19
- ⑫ 20
- ⑬ 21
- ⑭ 22, 23, 24
- ⑮ 25
- ⑯ 26
- ⑰ 27
- ⑱ 28
- ⑲ 29
- ⑳ 30
- ㉑ 31
- ㉒ 32
- ㉓ 33
- ㉔ 34
- ㉕ 35
- ㉖ 36
- ㉗ 37
- ㉘ 38
- ㉙ 39
- ㉚ 40
- ㉛ 41
- ㉜ 42
- ㉝ 43
- ㉞ 44
- ㉟ 45
- ㊱ 46
- ㊲ 47
- ㊳ 48
- ㊴ 49
- ㊵ 50
- ㊶ 51
- ㊷ 52
- ㊸ 53
- ㊹ 54
- ㊺ 55
- ㊻ 56
- ㊼ 57
- ㊽ 58
- ㊾ 59
- ㊿ 60

45. Basalt. Four-sided inscription
Face B (31')



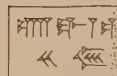
46. Fragment of same inscription
Face C



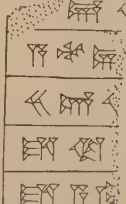
47. Basalt V, 7
24" thick.



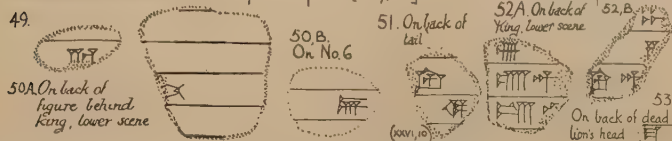
53
Brick XIX, C, 19
On edge, 2 1/2" thick



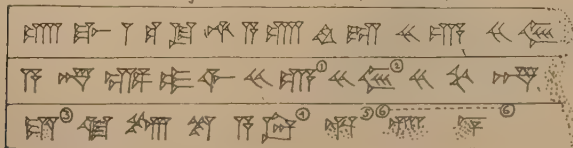
54. A, XL, 7. 2 1/2" thick
Brick.



Inscription on back of Ashurnasipal's Sculpture (Pl. I), large characters, lines 4 1/2" apart

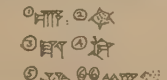


55. XIX, C, 7. On edge, 2 1/2" thick (Cf. 54, A and 54, B)

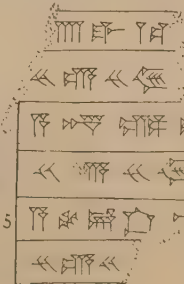


Duplicate of No 55.

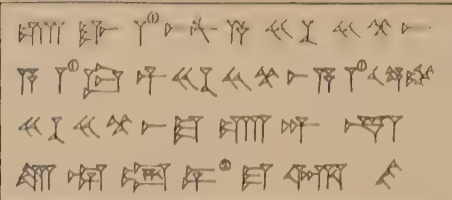
from debris near Well



54, B. Composite text from two
bricks, 'XXI and 'XXII, II,
both 2 1/2" thick

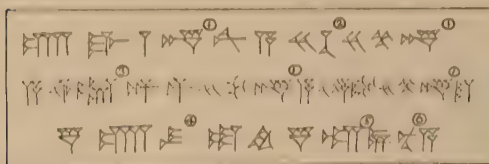


56



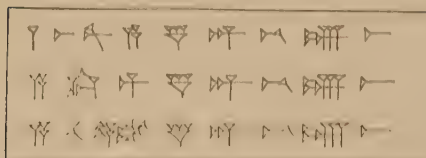
The above are composite texts from several bricks. Apparently when 𒀭𒀭𒀭 is used, the phrase preceding is 𒀭𒀭𒀭 etc.; when 𒀭𒀭𒀭 it is 𒀭𒀭𒀭 etc. Bricks of the first kind are XX.C.16, XX.C.19: probably XXI.B.8 (31"), and Surface (31")one. Of the second, XIX.C.26 (under pavement), XX.C.17, and Surface (one)(31") have both 𒀭 and some part of 𒀭𒀭 : XIX.C.13, XIX.C.18, XX.C.18(21") have some part of 𒀭𒀭 , but 𒀭 is lost. XIX.C.15 (31") has 𒀭 , but 𒀭𒀭 is lost. The following are either one or the other X.12 (31"), XIV.B.13 (21"), XVI.B.15 (31"), XIX.C.10 (21") with 𒀭 before 𒀭𒀭 , XIX.C.19 (21") (with 𒀭 before 𒀭𒀭), XX.B.17 (21"), XX.B.18 (31"), XX.C.21 (31") (with 𒀭 before 𒀭𒀭) actually in wall of Ashurnasirpal's palace; XXI.B.8 (31"), XXV.B.12 (21"), XXIX, and Surface (two 21" and 15"). (The figures in brackets give the thickness. Variants: 𒀭 appears to be omitted at pleasure throughout. 𒀭 probably varies with 𒀭𒀭 . 𒀭 varies with 𒀭 . 𒀭 cannot be said to be certain, but it occurs on at least three of these texts (see above).

58. XIX.C.20.



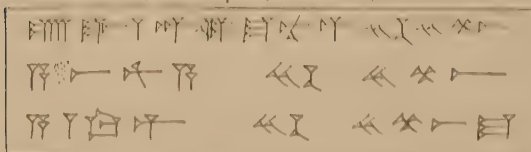
Duplicates (whole or part), XII.B.11 (1"), XX.C.9 (31"), XIX.C.10 (31"), XX.B.16 (41"), XX.C.20-25 (13 1/2" square x 4 1/2" thick), XX.C.21, in north wall of Ashurnasirpal's palace; XXVIII.B.11 (31"); XXIX, near Sargon's pavement (31"); surface (41") (one). Variants: 𒀭 , 𒀭 . No variant 𒀭 found in this class. 𒀭 written properly, XX.C.20-25, 𒀭 , 𒀭 .

61. XX.B.15. (13 1/2" x 13 1/2" x 4 1/2") On edge.

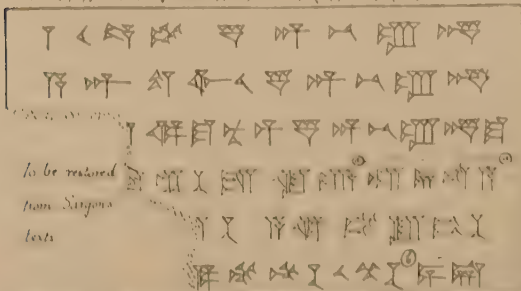


Dup. VII.A.2, XI.B.8 ("header" 4 1/2"); XIX.C.12 (21") (on both sides). XIX.C.17: XX.B.20 (41"); XX.C.20 (31"). See No.60.

64. XVIII.C.25 (in wall of palace). On edge. Dup. XXII.B.17 (41") See No.60 65. XX.C.15 On edge, 4 1/2".

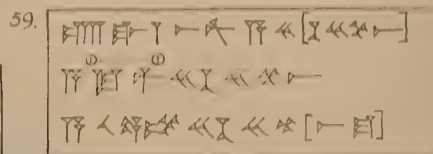


66. Composite text from bricks: XVII.9 (31"), XVIII.B. (under pavement) (31"), XIX.10 (31"), XXI.B.10 (pavement) (31"), XXII.2 (31"), XX.8 (31").

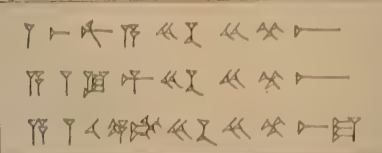


to be restored from Sargon's texts

57

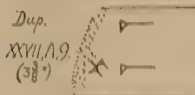


Composite text from bricks: XIV.8 (21"), XIV.B.11 (31"), XIX.C.20 (31"), XIX.C.26 (in pavement in Ashurnasirpal's palace (31"), XX.6, XX.7, (31"), XXIV.5 (41"), XXIV.11 (41"), L.1, 4 (31") 𒀭 𒀭𒀭 𒀭𒀭 𒀭𒀭

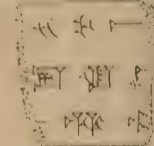


Composite text from bricks: XIX.C.20 (No.64), XX.C.20 (No.61), XXIII.A.4 (21"), LXXIII.3 (21"), Surface (41") (one) 63 Surface On edge 3 1/2"

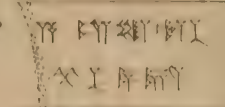
62 XV.C.1 on edge, 3 1/2" thick



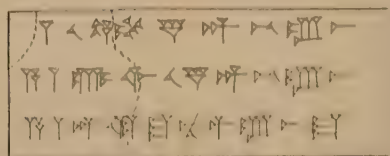
Dup. XXVII.A.9 (31")



67 XVIII.C.26 on edge, 3 1/2"



68.



Composite text from bricks: XII.B.3 (41"), XI.5 (41") On edge

𒀭 XIX.10 𒀭𒀭 𒀭𒀭 𒀭𒀭 XIX.10 omits.

No. 61.

(1) *Aššur-našir-apli šakni^{ilu} Bêl šangi Aššur* (2) *apil Tukulti-Ninurta šakni^{ilu} Bêl šangi Aššur* (3) *apil Adad-Nirari šakni^{ilu} Bêl šangi Aššur*.

Ashurnasirpal, prefect of Bêl, priest of Ashur, son of Tukulti-Ninurta, prefect of Bêl, priest of Ashur, son of Adad-nirari, prefect of Bêl, priest of Ashur.

No. 62. Uncertain.

No. 63. Cf. no. 58. *ik-šir* (?) for *ak-šir* (?)

Bricks of Shalmaneser II (858-824 B.C.).

(Composite text from bricks, their provenance given on pl. XLIV).

No. 64. (Cf. *KAH* ii, 107).

(1) *Ekal^{m ilu} Šulmannu(ma-nu)-ašarid šar kiššati šar^{mātu} Aššur* (2) *apil^{m (n)} Ašur-našir apli šar kiššati šar^{mātu} Aššur* (3) *apil^m Tukulti-Ninurta šar kiššati šar^{mātu} Aššur-ma*.

Palace of Shalmaneser, king of multitudes, king of Assyria, son of Ashurnasirpal, king of multitudes, king of Assyria, son of Tukulti-Ninurta, king of multitudes, king of Assyria.

No. 65. As above in two lines.

Bricks of Shamshi-Adad V (823-810 B.C.).

Nos. 114 (IV, 1), 119 (VII, B, 10). (Restored from bricks found in 1929).

(1) [*Ekal^{m ilu} Šamši*]-*Adad šarru dan-nu* (2) [*šar kiššati šar^{mātu} Aš-šur šar^{mātu} Šu-me-ri Akkadiki*] (3) [*apil^{m ilu} Šulmannu(ma-nu)-ašarid*] *šar kib rat irbitti* (4) [*apil^m Aš-šur našir-apli šar kiššati*] *šar^{mātu} Aš-šur-ma*.

[Palace of Shamši] Adad, the powerful king, [king of multitudes, king] of Assyria, king of Shumer and Akkad, [son of Shalmaneser], king of the four regions, [son of Ashurnasirpal, king of multitudes], king of Assyria.

Bricks of Adad-Nirari III (805-782 B.C.).

(Composite text from bricks, their provenance being given on pl. XLIV).

No. 66.

(1) *Adad-nirari šakni^{ilu} Bêl šangi Aš-šur* (2) *apil^{ilu} Šamši(ši)-Adad šakni^{ilu} Bêl šangi Aš-šur* (3) [*apil^{m ilu} Šulmannu(ma-nu)-ašarid šakni^{ilu} Bêl šangi Aš-šur-ma*] (4) [*bil^{ilu} Na-bi bēli-šu ša ki-rib^{ilu} Ni-na-a*] (5) [*ultu ušši*]-*šu adi tal lu-bi-šu* (6) [*ana balati-su*] *šulmu(mu) ziri šu u māti-(šu) epuš(uš)*.

Adad-nirari, prefect of Bêl, priest of Ashur, son of Shamshi Adad, prefect of Bêl, priest of Ashur, the son of Shalmaneser, prefect of Bêl, priest of Ashur, [the Temple of Nabû his lord, which is in the middle of Nineveh, [from] its [foundation] to its roof [for his life], for the welfare of his seed and (his) land he hath made.

No. 67. XVIII, c, 26, probably similar to above, but shorter.

No. 68. Lines 1-3 of above, except that l. 3 has omitted 'prefect of Bêl'.

Sargon (721-705 B. C.).

No. 69. Text from his limestone slabs in his pavement (xxvi-xxvii) and NE. doorway: with duplicates from about twenty-eight bricks (provenance on pl. xlv). Also II. R. 6, no. VII.

(1) *mŠar-gi-na šakni*¹ *ilu Bêl* (2) *nišak* *ilu*² *Aš-šur*³ (3) *šakkanak* *ilu Nabû u* *ilu*⁴ *Marduk* (4) *bît* *ilu Nabû u* *ilu Marduk bêlê*^{pl} (5) *ultu*⁴ *ušši-šu a-di taḫ-lu-bi-šu* (6) *a-na balaṭi-šu šulmu(mu) zirî-šu* (7) *za-kaṣ* *am*² *nakri*^{pl}-*šu* (8) *šutešur*⁵ *e-bur*⁵ *mātu Aš-šur*^{ki} (9) *ša-lam* *mātu*⁶ *Aš-šur*^{ki} *epuš(uš)*⁷.

Sargon, prefect of Bêl, minister of Ashur, priest of Nabû and Marduk, the Temple of Nabû and Marduk, the lords, from its foundation to its roof for his life, the welfare of his seed, the destruction of his enemies, the prosperity of the crops of Assyria, the safety of Assyria he has built.

No. 70. Bricks from the Well and Latrine.

(1) *mŠar-gina šarru dannu šar kiššati šar* *mātu Aššur* (2) *bît bêli* *ilu Nabû lib Ninua*^{ki} (3) *ana balaṭ napšâti*^{pl}-*šu arak balaṭi-šu* (4) *ultu ušši-šu adi taḫ-lu-bi-šu* (5) *epuš(uš) u-šak-lil*.

Sargon, the powerful king, king of multitudes, king of Assyria, the Temple of Nabû in the middle of Nineveh, for the preservation of his life (and) the prolongation of his existence, from its foundation to its roof he has built, has completed.

No. 71. xxiv, pit, 1' below pavement. Similar text, with some change in the lines.

No. 72. Two bricks from Tag, near 'Ain Sefna.

(1) *Ekal mŠar-gina* (2) *šakni* *ilu Bêl nišak Aš-šur* (3) *šarru dan-nu šar kiššati, šar*^{matu} *Aššur*.

Palace of Sargon, priest of Bêl, minister of Ashur, the powerful king, king of multitudes, king of Assyria.

No. 74. Fragment from xxxii, 6.

(1) *mŠar-gina šarru* . . . (2) *alu Dur-* . . . (3) *mu-šab* (4) *ilu* . . .

No. 80. xxviii, 12.

(1) *mŠar-gina šar kiššati šar* *mātu Aš-šur*^{ki} (2) *bît* *ilu Sin* *ilu Šamaš bêlê*^{pl}-*šu* (3) *ša lib* *alu Dûr-Šar-gina* (4) *ultu [ušši]-šu a-di taḫ-lu-bi-šu* (5) *[a]-na [balaṭi]-šu kîni palê*^{pl}-*šu* (6) *[šutešur e-bu]r* *mātu Aš-šur*^{ki} (7) *[ša-lam]* *mātu Aš-šur*^{ki} *epuš(uš)*.

Sargon, king of multitudes, king of Assyria, the Temple of Sin and Shamash, his lords, in the middle of Dûr-Sargon, from its [foundation] to its roof for his [life], the establishment of his reign, [the prosperity of the crop]s of Assyria, [the welfare] of Assyria, he has built

¹ V. *ša-ak-ni*.

⁵ V. *e-bur*.

² Omitted on variant.

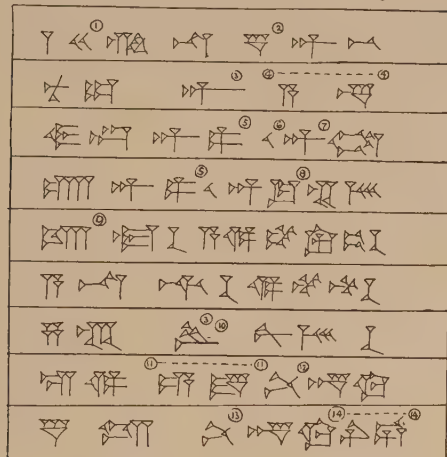
⁶ V. adds *ilu*.

³ V. *Aš-šur*.

⁴ V. *ul-lu*.

⁷ V. *e-pu-uš*.

69 Text from limestone slabs from pavement in XXVI-XXVII, and from large slab in NE. doorway



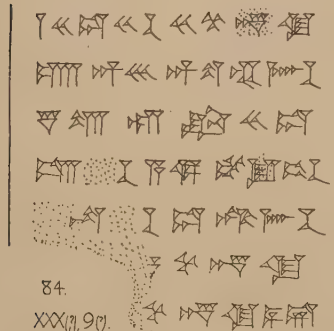
The following give the position and depth of 28 pieces of bricks inscribed in the same way (the figures in brackets giving the thickness):

IV, 5 (2"); V, 7 (3"); V, 7 (4"); VIII, 7 (3"); XI, B, 8 (3"); XIII, 3 (2"); XVI, 10 (2 1/2"); XVII, 9 (2 1/2"); XVIII, C, 12 (2 1/2"); XVIII, C, 13 (3 1/2"), below pavement XIX, 1 (2 1/2"); XXI, 10 (3 1/2"); XXII, 9 (3"); XXII, 10 (3 1/2"); XXIII, B, 10 (3 1/2"); XXVI, 9 (2 1/2"); XXVII, 12 (2 1/2"); XXVIII, 12 (3"); XXVIII, 12 (3 1/2"); XLII, 10 (2 1/2"); LXV, 9 (3"); LXVI, 11 (3 1/2"); LXVII, depth uncertain (3 1/2"); LXVIII, 8 (3 1/2"); LXXIV, 5; LXXVII, 6 (3"); XC, 2 (2 1/2"); XCI, B, 14;

These give the following variants: -

- ① ② ③ ④
- ⑤ ⑥ ⑦ ⑧
- ⑨ ⑩ ⑪ ⑫
- ⑬ ⑭ ⑮ ⑯

80. XXVIII, 12. 4 1/2 thick

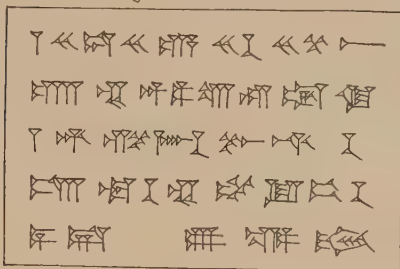


84.
XXVII, 9C.
3" thick.



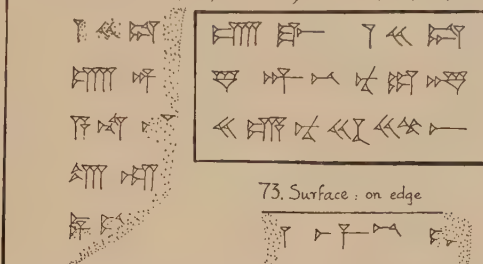
Duplicate (?) of five(?) lines in very bad condition.

70 Text on Sargon's bricks from the Well

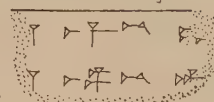


Many similar in Well: also pieces found, XX, C, 20; LXXVII, 5; LXIX, 7 (omitting 2 after), and spelling < > 4 1/2" thick XXVI, 8 (3 1/2" thick)

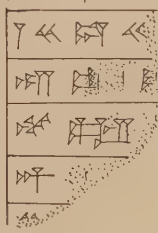
71. XXIV, P1, 1" below Pavement 72. On two bricks from Lag, near Ain Sefna (inscription on face) 1 1/4" x 6 1/4" x 4 1/2"



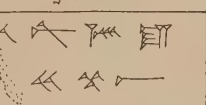
73. Surface: on edge



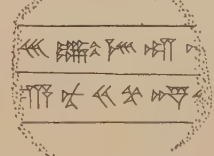
74. XXXII, 6. 4 1/2" thick



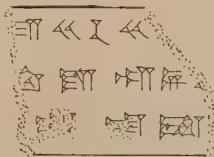
75. Surface: on edge, 4" thick.



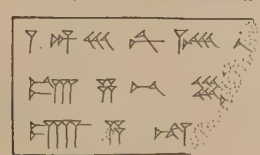
76. XXVI (C, 30), 4 1/2" thick



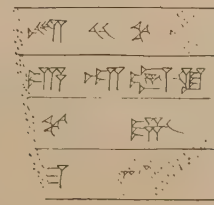
79. Surface. On edge, 3 1/2" thick



83 SH.



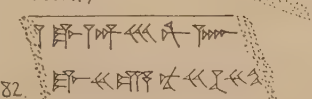
86 Surface: 3 1/2" thick



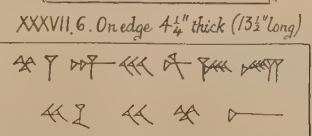
78. Probably surface.



81. XXVIII, ?

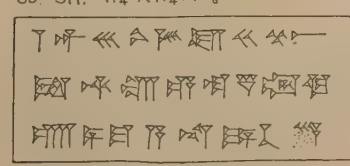


82.

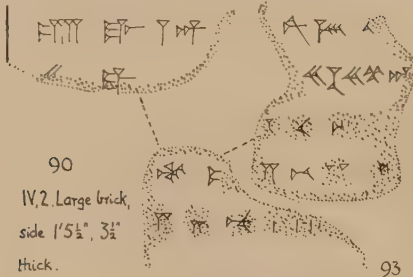


Duplicates: VII, A, 4 (12 1/2" x 9" x 3 1/2"), probably square: XX, 7; XXVI, B, 3 (11" x 11" x 4").

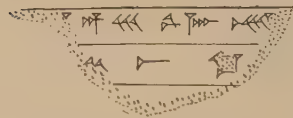
85 SH. 11 1/2" x 11 1/2" x 3 1/2"



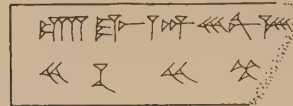
87. XXVIII, 7 (3 pieces of same brick?).



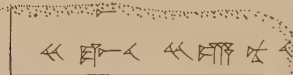
90
IV.2. Large brick,
side 1'5½", 3½"
thick.



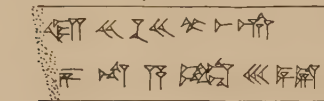
96. XXVI, B.7. 4" thick.



100 XXII, B.13 2½" thick



102. SH. on edge, 4½" thick



103. XX, C.16 - 104. XIX, C.16



108
Uncertain.

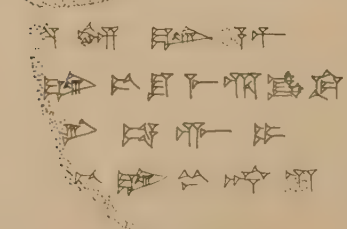


114 IV, 1.

113. XCI, 6. 3½" thick.



119.
VII, B.10 (pavement) 5" thick



88. Picked up on surface E. of Nebi Yunus.

3" thick

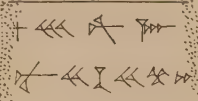
91.

XXXVI, 8
On edge, 4"

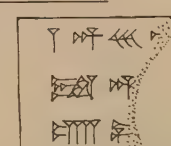


93

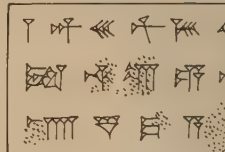
From Beisan, about
1 hour's walk N. of
Kauanjik, left bank
On edge, 4" thick.



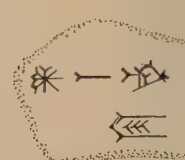
98.
From surface
near
Sennacherib's
S.W. Palace.
On edge, 5" thick



101. SH. On edge, 3½" thick



105. XVIII, C.10 2½" thick



109. XIX, C.8.



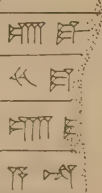
2½" thick

115

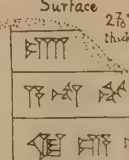
Surface 3" thick.



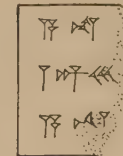
120. VII, B.1



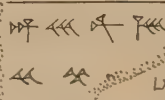
121.
Surface
2½" thick



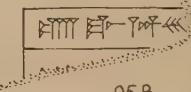
89. XIX, C.16. On edge, 4½" thick.



92. XXV, C.5, on edge, 6½" thick.

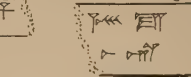


95A
LXXXIV, 4.
3½"

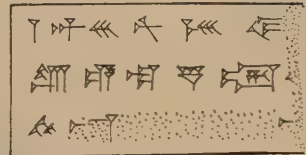


95B.

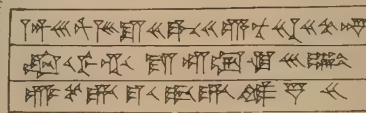
Surface. On edge, 3"



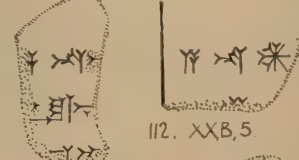
97.
SH. On edge, 3" thick.



99. XXXI, 7.



106. XVII, C.8. 107. XX, C.9 2½" thick



112. XX, B.5.

109. XIX, C.8.

110. XIX, C.8

111. XIX, C.8 2½" thick



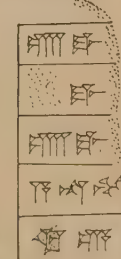
2½" thick

115

Surface 3" thick.



118 XI, B.9. 3½" thick.



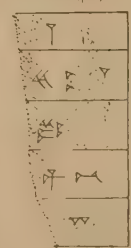
116
XXXVIII, 1 2" thick

117.

V.4



122 XX, B.13 (pit)



4½" thick

Bricks of Sennacherib (705–681 B. C.).

No. 75. Surface.

(1) [^{m ilu}Si]n-aḥê^{pl}-eriba (2) . . . šar mātu Aššur.

[Sen]nacherib, . . . king of Assyria.

No. 76. XXVI (?), 3 (?).

(1) [^{m ilu}]Sin-aḥê^{pl}-eri-b[a] (2) [šarru] dan-nu šar mātu Aš-šur^{k[i]}.

Sennacherib, the powerful [king], king of Assyria.

No. 78. Probably surface. Sennacherib fragment.

No. 79. Surface. Sennacherib fragment.

No. 81. XXVIII? (cf. no. 100, XXII, B, 13).

(1) [E]kal^{m ilu} Sin-aḥê^{pl}-[eriba] (2) [šarru] rabû šarru dan-nu šar kiššati šar mātu [Aššur].

Palace of Sennach[erib], the great [king], the powerful king, the king of multitudes, the king of [Assyria].

No 82. XXXVII, 6 (cf. nos. 91, XXXVI, 8: 92, XXV, C, 5: 95 A, LXXXIV, 4: 95, B, surface: 96, XXVI, B, 7).

(1) Mât^{m ilu} Sin-aḥê^{pl}-eriba (2) šar kiššati šar mātu Aššur.

Country of Sennacherib, king of multitudes, king of Assyria.

No. 83. From Sennacherib's house which he built for his son, from which came the Esarhaddon prism, and about four score pieces of others. Cf. no. 98, surface.

(1) ^{m ilu}Sin-aḥê^{pl}-e[eriba] . . . (2) ultu ša-bat (?) šar (?) . . . (3) bîti a-na [mâri-šu epuš].

Sennacherib . . . after . . . (?), a house for [his son he built?].

Nos. 85, 97, 101, also Sennacherib's house.

(1) ^{m ilu}Sin-aḥê^{pl}-eriba šar mātu Aššur (2) it-ti RU. E. APIN¹ Ninua^{ki} (3) bîti epuš-ma a-na mâri-šu iddin.

Sennacherib, king of Assyria, near the gardens² of Nineveh, a house hath built and given to his son.

Nos. 84 (xxx (?), 9 (?)), 87 (xxviii, 7), 88 (picked up E. of Nebi Yunus), 94 (LI, 3), 113 (XCI, 6), 118 (XI, B, 9), 120 (VIII, B, 1), 121 (surface).

(1) Ekal^{m ilu} [Sin]-aḥê^{pl}-eriba (2) šarru rabû(u) [šarru dannu ?] šar kiššati šar mātu (Aš)-šur

¹ So Scheil's duplicate (ZA. xi, 425: RT. 1900, 37), which adds the name of the son, Ashur-shum-ushabshi.

² The actual place whence these came was in a locality which might thus be described.

(3) *ekal mâri-[ia ku]-di-nu¹ GIN (?) . A* (4) *a-na mu-šab be-lu-ti-šu* (5) *ki-rib^{alu} Ni-nu²-a . . . epuš(uš).*

Palace of Sennacherib, the great king, [the powerful king], king of multitudes, king of Assyria : the palace of my true (?) youngest son for the dwelling of his lordship in the middle of Nineveh . . . I built.

No. 86. Surface.

(1) [^{m ilu} *Sin-aḫē^{pl}*]-eriba šar^{mātu} [*Aššuri*] (2) . . . *ki-rib^{alu} Ninua^{ki}* (3) [*u*]-še-piš (4) . . . *ma (?)*
 . . .

Sennacherib, king of Assyria, the . . . in the middle of Nineveh caused to build . . .

No. 93. From Beisan.

(1) . . . [^{m ilu} *Sin-aḫē^{pl}*]-eriba (2) [*šarru rabû šarru dan*]-nu šar *kiššati šar^{mātu} Aš-š[ur]*.
 . . . Sennach[erib, the great king, the] powerful [king], king of multitudes, king of Assyria.

No. 99. xxxi, 7 (dup. of inscription on slabs from the wall of Nineveh, II.R. 6, no. VIII, B).

(1) ^{m ilu} *Sin-aḫē^{pl}*-eriba *šarru rabû(u) šarru dan-nu šar kiššati šar^{mātu} Aš-šur* (2) *dûra u šal-hu-u ša^{alu} Ninua eš-šiš* (3) *u-še-piš-ma u-zak-kir hur-ša-niš.*

Sennacherib, the great king, the powerful king, king of multitudes, king of Assyria, the wall and rampart of Nineveh anew I caused to build and raised as high as the mountains.

No. 102. From Sennacherib's house (as above).

(1) . . . [^{m ilu} *Sin-aḫē^{pl}*]-eriba šar *kiššati šar^{mātu} Aš-šur* (2) . . . [*ša^{alu}*] *Ni-na-a eššeš(ês)*
epuš(uš).

. . . [Sennach]erib, king of multitudes, king of Assyria the . . . [of] Nineveh anew hath built.

Nos. 103-12, and 116. Various fragments of bricks written in archaistic style.

No. 122, A. *The Tablet from Ashurnasirpal's Palace.* In or on top of the wall of this palace were found twopieces of a tablet which when joined showed that the original tablet had been very large and thick, and written in six columns. It can hardly be later than the ninth century B. C. ; it is written in a very minute handwriting, hard to read without a glass, and made still harder by the action of time. It is not unduly laudatory to say that it is a unique tablet from Nineveh, as it gives in poetic form the details of the wars of early Assyria, particularly against the Kassites who had occupied Babylonia. Column II deals with the events of the reign of Ashur-uballit II (c. 1386-1369 B. C.), the king of Assyria who corresponded with Amenhotep IV, the father-in-law of Tut-ankh-Amen, about the wild Arab tribes of the Suti, thus rousing the jealous fears of the Kassite king Burna-Buriash, who was not only in touch with the

¹ Suggested restoration from KAH, i. 43, 5.

² V. na.

Egyptian king, but also had married his son to Amenhotep's daughter. The successor of Burna-Buriash, who was actually the grandson of Ashur-uballiṭ, by name Kadashman-Kharbe, was murdered in a revolution in Babylonia about 1368 B.C., and a usurper took his place, who was shortly to be overthrown by Ashur-uballiṭ in vengeance for his grandson. This is the episode up to which the second column of our tablet is leading, opening with the address of the Assyrian troops to their king. Column V begins with an account of the *octroi* between Assyria and the Kassites under Tukulti-Ninurta, king of Assyria (c. 1256-1233 B.C.), and the imprisonment of certain Kassite merchants who had run the blockade on behalf of their king. The interesting point is that the Assyrian king, treating them kindly, sends them back home with his signet-seal as a gift to the Kassite monarch, and this is curiously confirmed or paralleled by a tablet of Sennacherib (K. 2673)¹ about the beginning of the seventh century, which is inscribed with the direct copy of a text 'written on a seal of lapis-lazuli', and giving the inscription on the seal: 'Tukulti-Ninurta, king of hosts, son of Shalmaneser, king of Assyria; booty from Karduniash (i.e. the land of the Kassites). Whoever destroyeth my inscription or my name may Ashur and Adad blot out his name and land.' This seal from Assyria to Akkad . . . (?) (went), but I, Sennacherib, king of Assyria, after six hundred years conquered Babylon and from the spoil of Babylon I brought it forth'. On the edge of the tablet is written in archaic characters 'Property of Shagarakti-Shuriash, king of hosts'. Now Shagarakti-Shuriash was the father of Kashtiliash III (c. 1249-1242 B.C.), the Kassite king with whom Tukulti-Ninurta was compelled to fight, defeating him and capturing Babylon. It may well be, therefore, that we have for the first time the story how the seal was first sent down as a friendly gift to Shagarakti-Shuriash, after which, apparently, it was recaptured by the donor, only to be lost once more and then regained by Sennacherib; presuming, of course, that it is the seal mentioned. From the prayer of the Assyrian king, it is clear that the fires of hatred between the two countries are already being fanned.

COLUMN I

(1) . . . -bu (2) . . . -ra-ru (3) . . . ki (?) -iṣ-ma (4) . . . ṣa-ak-nu (5) . . . u . . . -zi-ib (6) . . . pu-ḥur . . . -e-ti (7) . . . du-u te (?) . . . iḥ (?) -ma (8) . . . sud . . . man-ma (9) . . . -u ṣi-ik (?) . . . taḥ-ṣi (10) . . . e-pi-ri ṣa- . . . (11) . . . e-lu[za]-a-a-ri (12) . . . [u-maṣ]-ṣe-ru ma-te-ma bal-tu²

(13) . . . Ku-ti-i u-še-eṣ-kin (14) . . . u-ḫi-iṣ kat- . . . (15) . . . ma-li-ki u-ru (?) -uḫ (?) (16) . . . -la-ti ba-u-la-at . . . āli (17) . . . ir-ta-ṣu pi-ri- . . . -ti (18) . . . [iṣu] kussi ku-du-ur-ra . . . -aḥ (19) . . . mârâti³ ru-be-e a-ṣi-bat [alu] Ninâ³ (20) . . . la'-e-ṣi-na ṣiḥru u bi (?) -' -ti

(21) . . . ṣa ḫip-pa-su ḫup (ḫup (?) -pa-at . . . -be-e-ri (22) . . . ṣa-a ni-ṣir-ta i[ṣ]-lu-ul (23) . . . -la-at la-a mi-ni ba-u-la-a-ti (24) . . . [e]-pu-ṣu IX-ṣu at-ru (25) . . . -bu-ul-ta-ṣu-nu i'-a-at-ma (26) . . . -ta-ṣu-nu i-kam-mar ma-an-nu (27) . . . -ga-li bi-i-ta ki-il-ta (28) . . . -di-e mi-nu-ut⁴ narkabâti⁴

¹ King, *Tukulti-Ninib*, 1, 106.

² ' . . . left never (a one) alive.'

³ ' . . . daughters, princesses of Nineveh'.

⁴ 'The number of the chariots'.

(29) . . . *šar Kaš-ši-i ni-šir-ta*¹ (30) . . . *IGI-BAR tam-ḥa-ri* (31) . . . *-na-at šī-bir-ri*
 (32) . . . *i-ru-ut ma-a-ti* (33) . . . *-ku-ub ta-ḥa-[zi]* (34) . . . *ri ri-* . . .

(35) . . . *-nam-ma* (36) . . . *gi u* . . . (37) . . . *-kad* . . . (38) . . . *ilu kakki* . . .

COLUMN II (*top broken off*)

- (1) [*Šar-r*]u i[l]-li-i[k] . . . (2) *ḫu-ra-du-šu ina* . . .
 (3) *be-li iš-tu ri-iš palê^{pl}-ka* [*ti-i-di* ?]
 (4) *ḫa-ab-lu u ip-pi-ru i-si-na-ni ḫi-i-ti u* . . .
 (5) *tu-ša-ḫi-za-na-ši-in-ma tu-še-eš-ku-un te-še-e sa-p[a-a]n* (?) *ri* (?) . . .
 (6) *ina it-tu be-lu-ti-ka dam-ka-ti mu-tu-ta ni-il-li-[ik]*
 (7) *ina palê^{pl} šarru-ti-ka ul iz-zi-iz man-ma an-na-ma a-na maḥ-ri-[ka]*
 (8) *ina kiššat ma-a-ti tâmti u šadî(i) te-lu-ut-ka ša-ak-na-[at]*
 (9) *ina me-til² šī-bir-ri-ka tu-še-eš-kin a-na šâri irbitti gi-me-ir kibrâtî^{pl}*
 (10) *tu-tir-ri-iš šêp mâti-ka ana mi-iš-rat la-a mi-ni pu-lum-gi tuk-[in]*
 (11) *i-du-u ḫar-ra-du-ut-ka šarrânî^{pl} i-ta-na-da-ru ḫa-bal-ka*
 (12) *u ki-ma tu-še-la-mad ša arki-ša ta-at-tar-ka-su na-šu-u pu-ul-ḥa-at-k[a]*
 (13) *i-na-an-na ku-bu-ut ana šar Kaš-ši-i la-am si-ma-ni su-pu-uḫ be-[lut]-su*
 (14) *pur-ri-id ki-iš-ri ša ul-ta-aš-ki-nu šu-mi iṭlê^{pl}*
 (15) *abi ki-ma marti³ ûmê^{pl} iš-tu ul-la-a limutta(ta)-ni šu-te-iḫ-[ḫu (?)]-ul-ma*
 (16) *šu-ta-ḫu⁴ ana ša-bur-ti-ni gi-na-a i-kab-bu-ut ni-ir-ta*
 (17) *u-za-am-mar ûmi(mî)-šam ana ḫul-lu-uḫ^{mātu ilu} A-šur šut-ru-ša-at u-ba-an-šu*
 (18) *ul ta-nam-za ka-a-a-na ana šarru-ut Aš-šu-ri-i li-tar-kas kiš-šu-ti*
 (19) *i ni-is-niḫ-ma napišta(ta) (?) -šu li (?) -ib (?) -lu-uṭ a-lik pa-na li-mu-ut ta-ia-a-ru*
 (20) *ina sa-[l]a-mi ia-u ḫi-ti i-si-ta-ni ku-bu-ut lu-u ḫa-ab-lu*
 (21) *te (?) -e (?) . . it-ti-ka ki-i (?) u-tak-ki-lu-ka maḥ-ru-u a-šar ta-ḥa-zi*
 (22) *u li-iš-kin bêl-ni eli šar Kaš-ši-i ina si-ḥa^{ilu} Ša-maš šûmi ša li-i-ti*

- (23) *Tar-ša-a-ma ma-za-la-at taḫ-ru-ub-ti a-šar mit-ḫu-ši tukuntî ku-un-na-at*
 (24) *ša-kin nu-gu-šu-u dan-nu ina be-ri-šu-nu i-ḫi-il-lu ardânî^{pl}*
 (25) *i-we-ir ina maḥ-ra^{ilu} A-šur ip-pu-uḫ eli nakri^{pl} išâtî na-aš-kat-ti*
 (26) *i-šar-rum⁵ ilu Bêl ḫa-ab-la-at a-a-[b]i u-ša-ak-mi nab-la*
 (27) *iš-ku-un^{ilu} A-nu me-iṭ-ṭa la pa-da-a e-lu tar-gi-gi*
 (28) *Na-an-na-ru^{ilu} Sin u-kin eli-šu-nu na-mu-un-ga-at⁶ ḫabli*

¹ 'The king of the Kassites a treasure'.

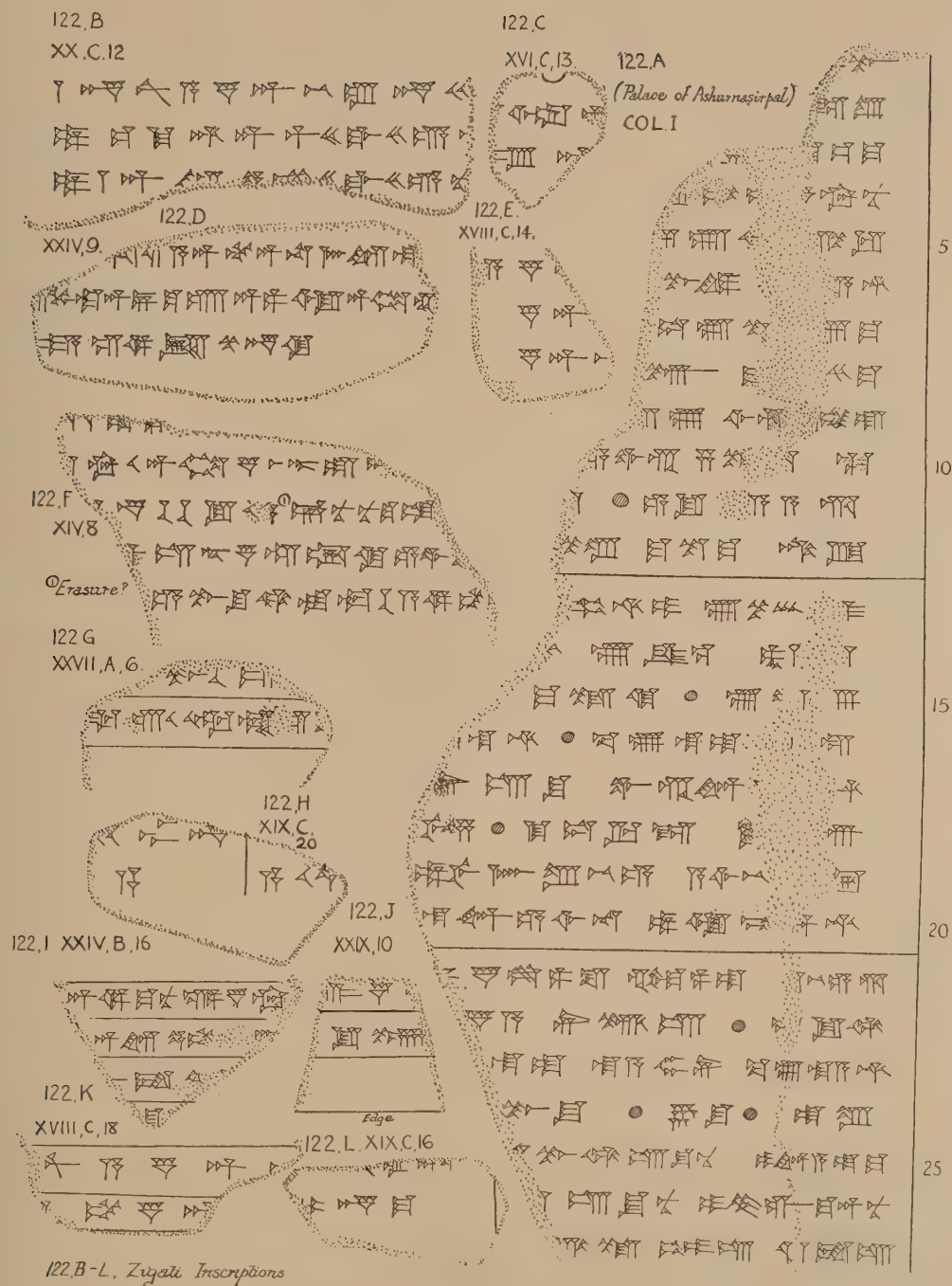
² Cf. King, *Records of Tukulti-Ninib*, 61, l. 6.

³ This beginning is difficult, but the text seems to be as I have given it.

⁴ A word used of cedar-pillars, *high* (Sargon, *Khors*, 163), and of clouds, *swelling* (Bezold, *Glossar*), from *šihû*, 'grow, swell', which might well be applied to the Kassite usurper Nazibugash.

⁵ From *šêru* (Bezold, *Glossar*, 263, b) ?.

⁶ *Magûgu* is 'to press', and it is possible that the emphasis on the crescent moon indicates the *curving* line of battle with the centre drawn back.



122.A.	COL I.	COL VI	
COL I. continued.	𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵		

- (29) *u-šar-di-im* (or, *šāri*) *a-bu-ba eli ta-ḫa-zi-šu-nu* ^{ilu} *Adad ur-ša-an-nu*
 (30) *u-lah-ḫi*¹ *e-en um-ma-na-at* ^{mātu} *Šu-me-ri u Akkadi*^{ki} ^{ilu} *Ša-maš bēl di-e-ni*
 (31) ^{ilu} *Ninurta ḫar-du ašarid(id) ilāni*^{pl} ^{isu} *kakkē*^{pl} *-šu-nu u-še-bi-ir-ma*
 (32) *u im-ḫa-aš kip-pa-ša*² ^{ilu} *Ištar ša ḫu-ra-di-šu-nu u-še-eš-ni ti-ma*

- (33) *Ar-ki ilāni*^{pl} *tik-li-šu šar-ru ina pa-ni um-ma-ni u-šer-ri ḫabli*
 (34) *is-saḫ-ma* (?) *GA . E* ^m ^{ilu} *A-šur-uballiṭ dap-na muš-ḫar-mi-ṭa ša-lam-da id-di*
 (35) *iz-zak-ru-ma ḫu-rad* ^{ilu} *A-šur a-na mi-it-ḫu-ši i-pa-an-nu*³ *mu-u-ta*
 (36) *i-ta-al-la-lu* ^{ilu} *Ištar a-ḫu-la-ap ina te-še-e i-na-ad-du be-el-ta*
 (37) *la-ab-bu-ma nak* (?) *-ru ki-ma* ^{ilu} *Zi-i ša-nu-u nab-ni-ta*⁴
 (38) *kad-ru iz-zi-iš a-na te-še-e ba-lu taḫ-li-pi*
 (39) *i-saḫ* (?) *-ḫu-tu i-ra-a-ti ut-tak-ki-ru lu-bu-ši*
 (40) *ik-ta-aš-ru pi-ri-e-ti us-si-ir-ra* (?) ^{isu} *wa-a-ri-tu aḫ-ri*
 (41) [*i*] *m-me-el-lu-ma ina še-iḫ-liḫ-ti* ^{isu} *kakki*^{pl} *da-pi-nu mu-tu ur-ša-an-nu*
 (42) *u i-zi-ḫa a-na a-ḫa-miš ki-ma ti-iš-bu-ut la-bi zu-ḫar-rat ūmē*^{pl}
 (43) *u ša ḫi-im-ma-at a-šam-ša a-ti te-šu-u i-ša-a-ad i-na ḫabli*
 (44) *kal eštēn(e-en)*⁵ *ḫu-ra-di ki-ma ūm(um) šu-mi i-še-ib-bu mu-u-tu*
 (45) . . . [*iz*] *-zi-iš i-te-we-ir i-ni*⁵ *il-ta-na*
 (46) . . . *ti-i-bu la-a* . . . (47) . . . *i-ki* (?) . . .

COLUMN III

- (4) *u* . . . (5) *a-di* . . . (6) *u* . . . (7) *u-* . . . (8) *ina ša-* . . . (9) *iḫ-* . . . (10) *sa-* . . . (11) *in-*
nin- . . . (12) *u ana* . . . (13) *ḫu-rad* . . . (14) *aš-gu-g[u]* . . . (15) *u-si-i[ḫ]* . . . (16) ^{isu} *kakku bēl*
mâtâtî . . . (17) *di-e-ša* . . . (18) *ša-kin mâtâtî* . . . (19) *ik-* . . . (20) *u* . . . (21) *uk-* . . .

COLUMN IV (*lost*)

COLUMN V (*top broken off*)

- (1) . . . *ma* (?) *šar-[ru]* . . . *ḫa-ri* . . .
 (2) *la-a-am mut-tab[bi]-lu* (?) *[ti a-la]-ki ša ši* (?) *ši* (?) *te* (?) *la mi-it-[gur* (?)] . . .
 (3) *ina mi-šir* ^{mātu} ^{ilu} *[A-šur šar-r]u iš-ku-un šip-ṭa a-na la-a mu-ši-e pi-ris-t[a]* . . .
 (4) *i-ba'-u [itti* (?)] *[g]i* (?) *-zi lu-u kal aš-kuḫ-pa* (?) *u mi-ḫir-tu . . ḫar za* . . .
 (5) *a-bi-lu-te* . . . *-ti ša šar Kaš-ši-i damkare*^{pl} *šu-bu-tu li-la-a i-* . . .
 (6) *u-ru-ni* . . . *-ti ana ma-ḫar* ^m *Tukulti-Ninurta bēl kišsat nišē*^{pl} *ka-su-u mit-ḫar-ta*
 (7) *u-šar* (?) *-di mi-i[d* (?) *-ru* (?)] *šar-ru a-šar* [^{ilu} *Ša-maš i-kil-ta ul ib-ni*

¹ Uncertain.

² Cf. Br. 9750, 9751, *kipṭū* and *melultu ša Ištar* for the same group.

³ An unusual word.

⁴ The reference is to Zû stealing the Books of Fate.

⁵ Cf. Arabic *kul waḥid*, 'every one'.

- (8) *e-pu-uš u-sa-a-ti a-na bēl^{ilu} Bâb-ili gi-mil-ta iš-ku-un*
 (9) *ba (?) -la ki (?) . . . na-a-šu (?) ki-i-su damkare^{pl} u-me-eš-šir*
 (10) *uš-zi-i[s-su-nu ina m]a-ḥar^{ilu} Ša-maš a-na ri-ši-šu-ni u-še-pi-ik ša-am-na*
 (11) *ta-mur-[ta ša] šar Kaš-ši-i ša u-ma'-e-ru^{ak} kunukki bi-ri-im-mi-šu*
 (12) *u-kin ina [m]a-ḥar^{ilu} Ša-maš e- . . . ka-bit (?) -tu (?) ilâni^{pl} im-daḥ-ḥa-ar*
 (13) *ilu Ša-maš bēl [di-ni]m ni-iš-ka ap-ta-dur rabû-ut-ka aš-ḥu-ut*
 (14) *ša-la-a (?) . . . [l]a e-ti-ik ma-ḥar [ilu-ti]-ka ši-pa-at-ka aš-šur*
 (15) *e-nu-ma [ina] ma-ḥar i-lu-ti-ka iš-[ku]-nu ri-kil-ta ab-bu-u-ni*
 (16) *u-kin-nu ma-mi-ta ina be-ri-šu-nu rabû-ut-ka iz-zak-ru*
 (17) *ša iš-tu ma[h] -ra daian ab-be-e-ni la-a muš-pi-lu-u ḫu-ra-du at-ta*
 (18) *u ša i-na . . . a-me-ir di-na-ti-ni mul-te-šir šamê at-ta-ma*
 (19) *am-mi-nim-ma . . . ša iš-tu maḥ-ra šar Kaš-ši-i e-šur-ta-ka ši-pa-at-ka tas-su-ḥu*
 (20) *ul iš-ḥu-[ut] ma-mit-ka e-tiḫ ši-pa-ra-ka ša-bur-ta iḫ-m[i]-il*
 (21) *u-še-ik^l [kil (?)] -la gi-la-ti-šu maḥ-ra-ka^{ilu} Ša-maš di-na-an-ni*
 (22) *u (?) . . . šar Kaš-ši-i gu-lu-ul-ta la-a e-pu-šu-an-ni sa- . . .*
 (23) *. . . -ka rabî(i) ana na-šir ma-mi-ti li-it kiš-ša-ti šu-ru-uḫ-ma (?)*
 (24) *. . . ši-pa-ri-ka ina a-bi-ik-ti ša tuḫunti nišê^{pl} -šu u . . . ali (?) -[šu ?]*

- (25) *. . . šu mu-du ta-ši-ma-a-ti i-šu-uš i-te-pa (?) -a (?) na-mur-[rat] . . .*
 (26) *. . . šu tar-gi-gi . . . -ši kal še-mi-i u damiḫla(ta) . . .*
 (27) *. . . iš-tu pa-na-ma ša ûmê (?)^{pl} na-ak-ru-ut ab-be-ni te-bu-[u] . . .*
 (28) *. . . -ma ana a-mat limutti(ti)-ni ina ma-ḥar^{ilu} Ša-maš ištu pa-an na-m[ur-rat ?] . . .*
 (29) *. . . [m^{ilu} Enlil-ni]rari a-lid ba-nu a-bi-ia šar kiššat nišê^{pl} mu-rim . . .*
 (30) *. . . [m^{Ku}]-ri-gal-zu ma-mi-it ilâni^{pl} ra-di-id ina . . .*
 (31) *. . . [m^{ilu} Adad]-nirari ba-nu a-bi-ia . . . i-su . . .*
 (32) *. . . m^{Na} zi-ma-ru-ta-aš . . . ina tuḫunti a- . . .*
 (33) *. . . m^{ilu} Šul-ma-an-[ašarid]¹ . . . ba-ri-i rubû-su . . .*
 (34) *. . . nap-šat . . . -ti-šu-nu i-pu-uš im-daḥ-h[a-ar] . . .*
 (35) *. . . ni . . . ša la-a iš (?) . . . ri . . .*
 (36) *. . . -dan-ni ša-šu-ma ru . . . iḫ-ḥar-mi . . . (37) . . . ina be-ri-it mâtâti daiânu la-a muš-pi-lu-[u] . . . (38) . . . dam-ḫi ša la-a[u-da]n-na-nu . . . (39) . . . at-ta maḥ-ri ta-am-ma . . . (40) . . . di-ma ḥa-at-tu-u . . . (41) . . . -da-ti-šu . . .*

COLUMN VI

(1) *. . . u . . .*

(2) *. . . -gi-šu^{ilu} A-šur* (3) *. . . ilâni^{pl} bēl di-i-ni* (4) *. . . mu-ni-ḥa ul i-šu* (5) *. . . i-ru-šu it-nab-bal-kat* (6) *. . . ma-mit ilâni^{pl} i-ši-tu* (7) *. . . e-mi-im na-aš-kat-ta* (8) *. . . -im ilâni^{pl} a-šar ta-ḥa-zi* (9) *. . . ta (?) -šar-ri-iḫ^{isu} kakki^{pl}*

¹ Mutilated. It might be [Šu]-ba-ri-i following, but it is difficult to see what but Shalmaneser can be intended.

(10) . . . *a-di-ri pa-na u ar-ka* (11) . . . *-e še-mi-i šu-me-la u im-na* (12) . . . *ina na-ḫab za-ia-a-ri* (13) . . . *-ru-uš pu-ḫur kâl šarrâni^{pl}* (14) . . . *it-tar-ra-ru šadû^{pl}-u* (15) . . . *ul-ta-naḫ-ša-ḫa ka-liš kibrâti^{pl}* (16) . . . *šêr ilâni^{pl} mi-na-a-šu* (17) . . . *^{pl} ši-pi-iḫ-šu i-te-eš-ra* (18) . . . *še-mu ši-i nišê^{pl} mi-lik mâti* (19) . . . *u u-man-du-u uš i tu ina šap-ti*

(20) . . . *-di ar-ki apil bu-uk-ri-šu* (21) . . . *kal (?) ra-ša-aš-šu ilu aš-la* (22) . . . *-ti ḫa-bal-šu ma-am-ma* (23) . . . *-ku ga-ba-ra-šu a-šar ta-ḫa-zi* (24) . . . *ḫil-la-ta pa-šuk-ta šar-ta* (25) . . . *ṭa (?) ni-iš ilâni^{pl} i-ni-' ma-mi-ta* (26) . . . *ilâni^{pl} na-ši-ru pi-ris-ti-šu* (27) . . . *it . . . iṭ-lu (?) u ra(ša ?)-di-id arki-šu-un*

(28) . . . *ta šar Kaš-ši-i i-ši-iṭ ma-mi-ta* (29) . . . *ḫil-la-ta ša-bur-ta ib-ni* (30) . . . *[i]t-tak-ka-ru . . . KA (?) -šu ku-un-na-at* (31) . . . *-kut ša-ab-tu an (?) -na-šu ana UD . DA alâni^{pl}* (32) . . . *[ša]-ak-na^{pl} iḫ-pa-sa-sa eli-šu* (33) . . . *ar šu ti (?) i-mi-du ar-nu^{pl}*

(34) . . . *i (?) -ni-' ši-pa-ra . . .* (35) . . . *ina nu-kur-ta iḫ-bi . . .* (36) . . . *Šam (?) -ši ta-kil-ma* (37) . . . *[tu]-ḫu-um-ta iḫ-ši-iḫ* (38) . . . *ḫi-mi-il-ta* (39) . . . *ta iš-ku-u[n]* (40) . . . *[u]m-ma-ni ša-k[in]* (41) . . . *e (?) laḫ (?) . . .* (42) . . . *mi-še-ḫi . . .*

COLUMN II

[The Ki]ng came . . . His warriors in . . . [thus spake]:

'O Lord, [thou knowest] from the beginning of thy reign

That war and rapine have been our holiday; rebellion and [fighting]

5 Thou hast taught us, and hast brought about confusion, destruction (?) . . .

Under the fair standard of thy realm we march'd in valour,

Throughout the years of thy reign none here (?) hath withstood [thee],

Secure hath been thy supremacy o'er hosts of land, sea, and hills,

By the power of thy staff thou hast settled all nations in the four quarters,

10 Thou hast extended the foot of thy land to bounds uncounted, hath stre[nghthen'd] the borders,

Kings, knowing thy valour, fear thine onslaught,

And, as thou hast taught from the result of that wherein ye have been bound to each other, they are beset with terror of thee.

Now press hard against the king of the Kassites; bring his ru[le] to an end before (its) due time,

Scatter the forces which have taken to themselves the name of heroes!

15 O father! Like gall are the days of yore—crush out our woe!

The upstart (?) for our hurt continually devises evil,

He plots daily to destroy the land of Ashur, his finger is pointed.

Stay not! Mayst thou knit power continually to the realm of Assyria.

Come, let us press forward, and let him keep his life that goeth forward, let him die that turneth back!

THE EXCAVATIONS ON THE

- 20 In peace where is the end ? Our woe (?) is grievous (?)—let there be war !
 The . . . (is) with thee, when (?) it will hearten thee (to be) the foremost in the battlefield,
 And may the Sun-god cause our lord to attain in the revolt a glorious name o'er the king
 of the Kassites !'
-
- Array'd were the hosts of war in the mellay ; battle was join'd !
 Launch'd was the fierce charge between them, that the slaves trembled.
- 25 Ashur push'd forward in the van, kindling a devouring fire against the foe,
 Bel clave (?) the enemy's midst, rousing the flame to burn,
 Anu poised (his) ruthless weapon above the malignants,
 The Crescent Moon forced against them the pressure of battle,
 Adad, the hero, drove down (a wind (and) ?) a flood against their fighting line,
- 30 The Sun-god, lord of judgment, dishearten'd (?) the king of the forces of Sumer and
 Akkad,
 Ninurta, the warrior, leader of the gods, brake their weapons too,
 And Ishtar smote her lyre (?), which drove their warriors mad.
-

- Behind the gods, his helpers, the king at the forefront of the army began the fight,
 Crying ' I am Ashur-uballit, the destroying giant ', cast down (their) corpses,
- 35 The warriors of Ashur, eager for the fray, were facing death,
 They shouted ' Ishtar—how long will they cast down the Lady in confusion ? '
 Madden'd and estranged, like Zû they changed Creation,
 Attack'd the rabble boldly, without protection,
 Baring (their) breasts, they threw aside their clothing,
- 40 Gathering up (their) flowing hair, they bound (their) shields behind (them).
 Worn out with the slaughter of the swords were warrior, hero, (and) giant,
 And panted against each other, as when lions seize each other, (in) whirlwinds of the
 storm,
 And as with the heat of the tempests drove the rabble from the battle,
 Every one (?) of the warriors sating himself with death, as though it were a fast-day.
- 45 . . . angrily (?) push'd forward, driving back . . . ?

COLUMN V

- Before the [entr]y (?) of go[ods] whereof . . . was not ac[cepted (?)]. . .
 The [kin]g made an ordinance not to go forth from the borders of As[syria], a decision (?)
 . . .
 They came [with (?)] fleeces (?) or any . . . , and produce of the . . .
- 5 Merchants, who were bringing [the goods] of the king of the Kassites, were arrested,
 [going out (?)] by night (?),
 They were brought before Tukulti-Ninurta, the lord of hosts of men, bound together.
 The king (?) put (them in) w[ard (?)], a place where the sun cast no shadow,
 He did a favour to the lord of Babylon, acting kindly,
 Without (?) [taking (?)] the contents (?) of a sack (?), he let the merchants go free,

- 10 Letting them stand in the sunlight, (and) pouring oil on their heads ;
The gift [for] the king of the Kassites, which he sent, was his signet-seal,
He set before the Sun-god . . . the gods, he pray'd :
 'O Sun-god, lord of [judgmen]t, I have fear'd thine oath, have respected thy greatness,
I, who have not transgress'd thine [inhibition], before thy [divinity] have guarded thine ordinance.
- 15 When our fathers made a covenant in the presence of thy godhead,
They put an oath between them, swearing by thy greatness ;
O thou, who from aforetime wast judge of our fathers, unchanging, a warrior,
And who in . . . seeth our cause, art ruler of heaven,
Why from of old . . . the king of the Kassites from thine inhibition, hast thou absolved
 (him from) thine ordinance ?
- 20 He hath no respect for thine oath, he hath transgress'd thy command, devising (?) oppression,
He maketh light of his naughtiness towards thee ! Be my judge, O Sun-god !
[Judge if] the king of the Kassites hath not treated me with contempt ! Ove]rwhelm (?) him !]
[But by] thy great [divinity] unto him who hath kept thine oath grant the fame of multitudes !
[By] thy command, in defeat in war let his people and [his] city (?) [be destroy'd !].'

The rest is mutilated, but he goes on to call to mind the previous hostility between their fathers and the acts of ' [Enlil]-nirari, begetting the progenitor of my father ', with ' [Ku]rigalzu [despised] the oath of the gods ' ; ' [Adad]-nirari, who begat my father ', with Nazimarutash ; and Shulman-[asharid (?)] (Shalmaneser), his father, thus mentioning the Assyrian and Kassite kings of the period immediately preceding him ; and, lastly, the Hittites in l. 40.

No. 122 D, F, and O : III R. 3, 12 : 81-2-4, 182 (see Winckler, *Sargon*, nos. 14 and 15).

These three new fragments, added to the two already known, restore most of the original text :

(1) ^mSar-gi-na š[ar kiššati šar] ^{mātu}Aš-šur^{ki} šakni ^{ilu}Bêl nisak ^{ilu}A-šur (2) ri'u [kînu ša ^{ilu}A-šur (?) u] ^{ilu}Marduk (3) ša a-na šarru-ti ib-bu-u-šu ¹ilâni^{pl} rabûti^{pl} a-na-ku-ma¹ (4) bît ^{ilu}Nabû u ^{ilu}Marduk ša ina tar-ši abulli eš-še-ti . . . i (?) -na ip-šu e-na-aḥ-ma (5) ^m^{ilu}Adad-nirari² apil [^mŠam]-ši- ^{ilu}Adad šar ^{mātu}Aš-šur^{ki} . . . ti (?) LX + XII šanâti^{pl} im-la . . . e-pu-uš (6) ša bîtu ša-a-tu šur-šu-šu ul³ [i ?] -dan-nu-nu išid-su ki-i iršitu(tu) u šad- . . . u la-bi-ru-ta il-lik-ma (7) aš-šu la inakar šubtu-šu i-na ṭi-i[ḫ] bît ^{ilu}Ištar⁴ ša ^{alu}Ninua^{ki} e-pi-šu pi-i ^{ilu}[Nabû (?) ina] ma-kal-ti ^{am}barû-ti i-pu-la-an-ni-ma (8) bît ^{ilu}Nabû u ^{ilu}Marduk bêlê^{pl} -ia ša i-na ṭi-iḫ bît ^{ilu}Ištar ša ^{alu}Ninua^{ki} e-pu-šu ul-tu ušši-šu a-di taḫ-[lu-bi-šu] . . . ^{karpatu}zi-ka-a-ti

¹ Omitted on Winckler 14.

² So on Winckler 14, but *nî-ra-ri* on III R. 3, 12.

³ Thus on tablet in III R. 3, 12 : but *lu-u* (perhaps erasure) on no. 122 F.

⁴ 122 F, *Iš-tar*.

aš-kun (9) *a-na balaṭi-ia sulum* [*ziri-ia*] *sa-kaṣ* ^{am}*nakri-ia šutešur ebur* ^{mātu}*Aš-šur* ^{ki} [*ša-lam* ^{mātu}*Aš-šur* ^{ki}] *e-pu-uš*.

Sargon, k[ing of the world, king] of Assyria, prefect of Bêl, minister of Ashur, [true] shepherd [of (?) Ashur (?) and] Marduk whom the great gods have called to the kingdom am I. The Temple of Nabû and Marduk, which had been built at the time of the new City Gate, decayed, and Adad-nirari, son of [Sham]shi-Adad, king of Assyria, (re)-built . . . seventy-two years[previously]. Of this temple its grounding was not strong and its foundation-platform was like the earth . . . and it had become old; to repair it without the changing of its position opposite the Temple of Ishtar of Nineveh the voice of [Nabû in] the divining-bowl of the craft of the seer answered me. The Temple of Nabû and Marduk, my lords, which he had built opposite the Temple of Ishtar of Nineveh, from its foundation to [its] roof . . . my memorial-bowls I deposited, for my life, the welfare of my seed, the destruction of my enemies, the prosperity of the crops of Assyria, [the safety of Assyria], I built.

This text augments the *zigatu* long known from III R. 3, 12. It restores the line which was supposed to give the name of the founder of the Temple of Nabû, but actually gives only the approximate period 'in the time of the new Great Gate'. It was then restored by Adad-nirari (according to the Eponym Canon in 788 B. C.), and this, if my interpretation of the date given above is correct, was seventy-two years before Sargon restored it, i. e. in 716 B. C., which gives us for the first time the actual date, and may indicate the restoration of the passage in the Eponym Canon for 719, 'the foundation of the [Temple of Nabû] was torn up' (for repairs), the work being complete in 716. As has been mentioned on p. 105, the desire to keep the temple 'opposite' that of Ishtar may explain the peculiar repairs of Sargon which left the front at 32° E. of N., but orientated the inner court correctly. It is an important addition to our knowledge of the site of the Temple of Ishtar, hitherto known only in its relative position to Sennacherib's palace. It must thus lie on the central ridge somewhere between them.

No. 122, B.

(1) ^m*Aš-šur-našir-apli šakni* ^{ilu}*Bêl šangi Aš-šur šar* . . . (2) *mâr Tukulti-Ninurta šarru rabû šarru dan-n[u]* . . . (3) *mâr* ^m^{ilu}*Adad-nirari šarru rabû šarru dan-nu* . . .

No. 122, C, E, K, and L apparently add 'prefect of Bêl, priest of Ashur' after the name of his father and grandfather.

No. 122, H.

. . . (1) . . . *šar* ^{mātu}*Aš-šur* (2) . . . -a (gap) (3) *apil Adad-nirari* . . .

No. 122, Q.

(1) ^m*Aš-šur* [*našir-apli*] . . . (2) *apil Tukulti* [*Ninurta*] . . . (3) *Bît* ^{ilu} [*Ištar*] . . .

No. 122, I.

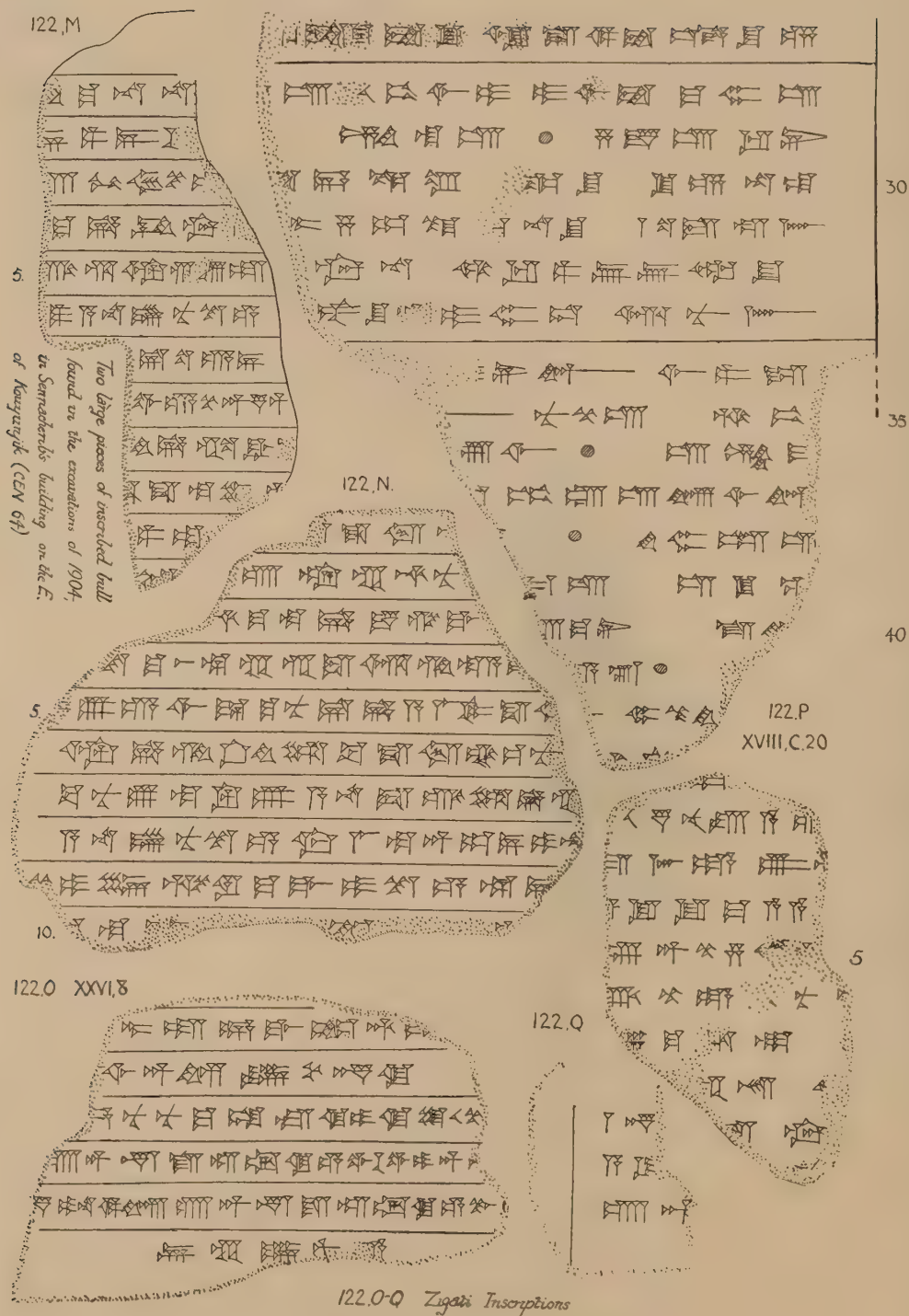
(1) . . . [^m^{ilu}*Šulmanu* (*ma-nu*)-*ašarid ša-ak* [*nu* ^{ilu}*Bêl*]] . . . (2) [*apil* (?) ^m ^{ilu}*Adad-nirari*] . . . (3) . . . *id-* . . .

(Possibly of Shalmaneser I, son of Adad-nirari I.)

122A COL V, continued

[illegible]

122A COL VI. continued



No. 122, P.

(1) ... *ab* ... (2) ... *u ša nu ta a* ... (3) ... *ia u* ... (4) ... *lu-lu-ma-a-a* ... (5) ...
rid an kur za ... (6) ... *luḥ mâtî-ia . . ku . .* (7) ... *ma-da-tu* ... (8) ... [*an*]-*ḥu-su* ...

(From a comparison with the texts in King's *Records of the reign of Tukulti-Ninib*, it would appear to belong to Shalmaneser I.)

No. 122, M, N. Inscriptions from piece of bull found in 1904 in Sennacherib's Eastern building (the *bît nakkaptî*).

(1) [*ina sa-pan mâtû*] *Am-ma-na-na* (2) [*u-šap-tu*]-*ni pa-ni-šu* (3) *zir kiš-še-e* (4) [*šikin-šu nu-su-ḥu ma-l*] *a aban kišadi ak-[ru]* (5) [*aban ḫa-bi-e ma*]-*ga-ri u ri-iḥ-ši* (6) [*šu-tu-ḫi mur-ṣ*] *u a-na ameli la ṭiḥē(e)* (7) [*ša ul-tu mâtû Ni-pur šadi ib-bab-la*]¹ *uṣ-pir-dan-ni* (8) ... *-pi kal-mat*
ilû Ša-maš (9) ... *-ḫi takḥu-ut-lul (?)* ... (10) ... *ša la* ... (11) ... *pa-at* ...

(1) ... *ša kima* ... (2) ... *bît nak-kaṭ-ti nu* ... (3) ... *ti ma-la takbur-zi-gal-[li ša la in-nam-ru]* (4) [*ma*]-*te-ma ina alu Kaṭ-ri-da-ar-gi-la-a* [*a pa-a-ṭi alu Til-bar-si-iṣ*] (5) ... *u-kal-lim ra-ma-nu-uṣ*² *ak a-lal-lum ša kima* ... (6) *u tak GI. RIN. ŠAR. GUB. BA ša kima inib*³ *NU-[UR-MA]* ... (7) *ba-nu-u la-lu-u a-na da-ga-li takḥu (?)* ... [*mur-šu*] (8) *a-na ameli la ṭiḥē(e)*¹ *ki-lal-lu-an ab-ni i-na* ... (9) ... *šadi(i) in-nam-ru rabiš i-te-e alu Ni-[nu-a i-na ir-ši-ti]* (10) [*mâtû B*]-*a-la-ṭ[a-a-a ki-i] te-[im ili-ma, etc.]*³

The texts are similar in composition to the building-texts of Sennacherib, from which much can be restored. But the description of the stone *GI. RIN. ŠAR. GUB. BA* (as also in the Esarhaddon passage, prism A, Col. IV, and in the new prism) as being 'like the fruit of po[megranate]' indicates that it is like the little rounded transparent crimson seeds of the fruit, which would surely make it carnelian, so frequently used for beads. How far *takGUG* (*sandu*, the 'red stone'), properly 'cinnabar', is definitely 'carnelian' is a debatable point (see my *On the Chemistry*, 86 and 113). For the stone, cf. *Assyr. Med. Texts*, 102, 34. Unfortunately, in the case of the *alallum*-stone, the simile is lost.

(K) THE POTTERY⁴

The pottery from the temple site may be divided into six chronological groups—(i) Prehistoric (3500?–3000 B. C.), (ii) Late Assyrian (900–612 B. C.), (iii) Parthian (200? B. C.–A. D. 226), (iv) Sassanian (A. D. 226–627), (v) Christian (A. D. 627–1380?), and (vi) modern.

Prehistoric. The prehistoric sherds were found at all levels on the temple and palace sites but not in Sennacherib's House. The typical ware was a fine white fabric, sometimes made by hand, sometimes on a wheel, but always bearing traces of the straw that had been used as a *dégraissant*, and adorned with

¹ Nebi Yunus slab, I. R. 43 ff., 73.

² Bull Inscr., 46 ff.

³ *Ibid.*, 49.

⁴ The following description of the pottery is by Mr. R. W. Hutchinson, M.A., F.S.A.

stylized geometric designs in a matt or slightly lustrous black paint. This pottery was obviously related to that of the great Copper Age culture of the first period at Susa, but closer parallels to it were found at Bender Bushire in Persia and at Abu Shahrain, Tell al 'Ubaid, Ur, Assur, Farah, and many unexcavated sites in Mesopotamia. These monochrome fabrics appear generally to have been pre-Sumerian, but analogues to the polychrome jars of Tepe Mussian and the second stratum at Susa have been excavated at Farah and at Ur associated with the earliest Sumerian remains. At Jemdet-en-Naşr both monochrome and polychrome wares were found with tablets inscribed with pictographs that were evidently prototypes of the Sumerian characters.

The sherds from Kouyunjik and from the neighbouring mounds of Hashamiyah, Abbasiyah, Gintarah, and Yarimjah all belonged to the earlier group. The sherds from Kouyunjik resembled those from Sumer except that they lacked the typical greenish hue and there were no naturalistic or polychrome designs. The pottery was usually too fragmentary to afford much idea of what the shapes had been, but they certainly included a pyxis of the Tell al 'Ubaid type,¹ some form of stemmed bowl, and perhaps shapes like the bottles from Farah² or the transitional vases from Rhages.³ The designs included hatched triangles, rows of solid triangles, chequers, chevrons, wavy lines, lattices, dots, basket patterns, and a frieze of stylized birds. The coarse sherds, which were rare, included a moderately coarse white fabric with girding bands of black or red paint, and one or two plain red or buff fragments.

The pottery from Hashamiyah was all prehistoric and resembled the finer examples from Kouyunjik; it was almost entirely hand-made, and the ornaments were net patterns, solid triangles, horizontal chevrons, and wavy lines. We also picked up a little coarse white ware with scratched decoration, one or two plain red sherds, and a few chips of flint and obsidian.

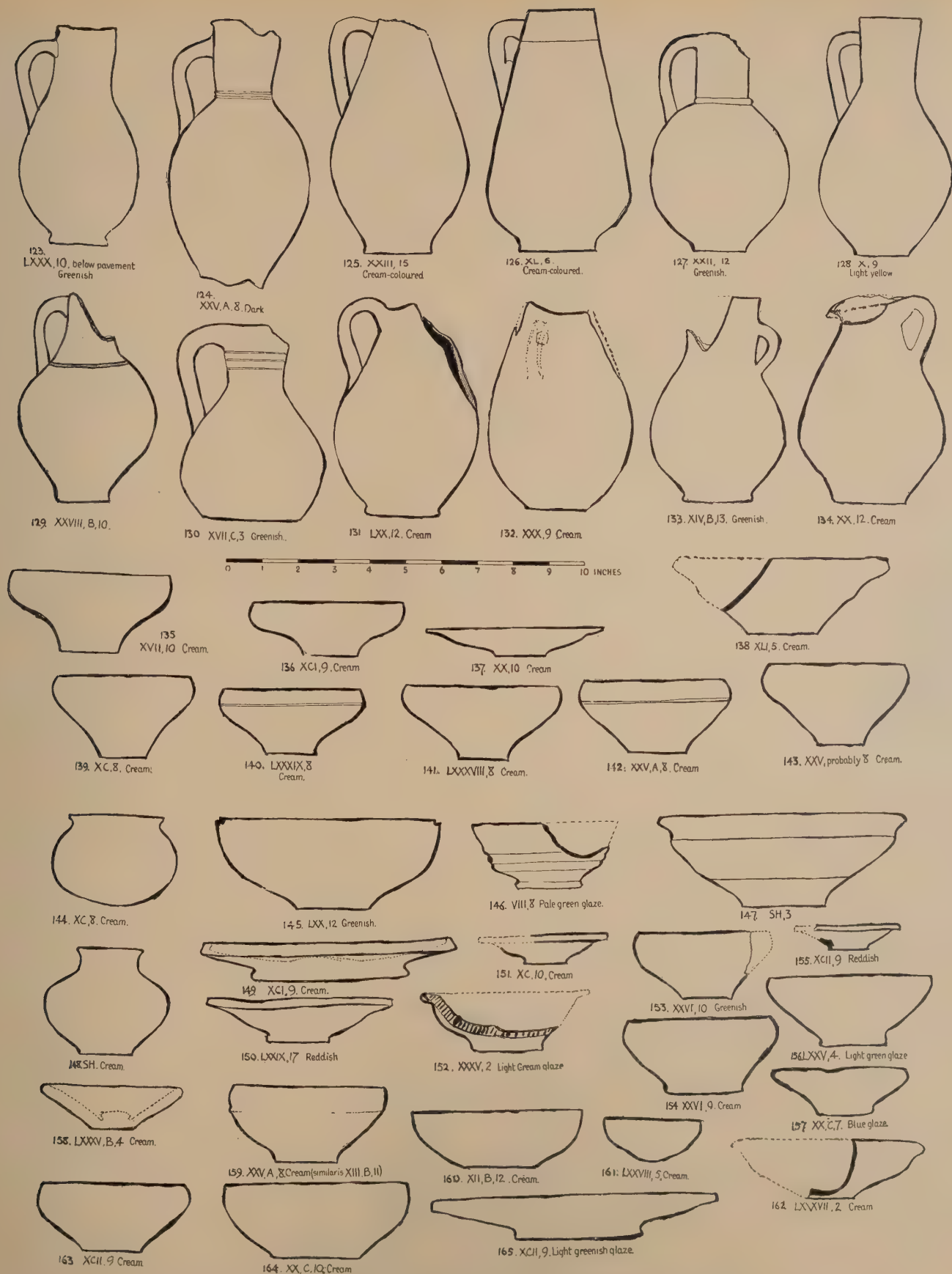
From the mound of Abbasiyah we collected one piece of fine ware (a pyxis rim with concentric triangles), some coarser sherds with girding bands, usually wheel-made, and a large chert blade. The field south of the mound had evidently been occupied during the Christian period.

On Tell Gintarah we found flint and obsidian blades and sherds of the Hashamiyah type, but on the farther side of the *wady* running north of the mound we picked up one coarse painted sherd, a piece of a saddle-quern, some flint and obsidian blades, and some coarse buff or black ware, apparently hand made, but quite unlike anything from the other sites.

¹ Hall, *Excavations at Tell al 'Ubaid*, pl. LI, type P viii.

² Frankfort in Ebert's *Reallexikon der Vorgeschichte*, xiv, 85.

³ Pottier, *Rev. Arch.*, 1926, vol. xxiii, p. 16.



POTTERY FROM THE TEMPLE SITE, AND FROM SENNACHERIB'S HOUSE (nos. 147, 148)
(Parthian, nos. 125, 126)



At the base of the Yarimjah mound we found one painted sherd, some chips of obsidian, and some plain pottery of uncertain date.

Late Assyrian. The Assyrian pottery from the Temple of Nabû was very uniform, and seems to have belonged chiefly to the Sargonid period, although the presence of a few Greek sherds dating from the tenth to the eighth century B. C. and of bricks recording the restoration of the temple by Adadnirari III in 788 B. C. suggests that some of the native pottery may also have been pre-Sargonid. Few sherds, however, could be dated as such by their shape or fabric, and the shapes characteristic of the earlier levels at Assur were conspicuously absent.

The Sargonid vases were divisible into three main groups: (a) fine plain, (b) glazed, and (c) coarse household. The first and most common consisted of a series of fine white or reddish brown vases 'thrown' and 'turned' on the wheel and well baked. The surface was usually the same colour, as the fracture and the black grit employed as a *dégraissant* were very noticeable. The use of a 'slip' was unknown, but the vases were often coated inside with bitumen to make them watertight. The only decoration consisted of one or two incised lines on the neck or shoulder.

The shapes comprised many varieties of bowls, saucers, jugs, and jars, but perhaps the most characteristic were: (i) a small bowl with incurved rim and flat base,¹ (ii) a saucer with flat rim and raised ring inside,² (iii) a bellying jar with sharply marked shoulder,³ and (iv) an ovoid jug with cylindrical neck.⁴ Other forms were an amphora and another variety of bellying jar, both with out-curved rims. Very characteristic features were the concave handles, the stepped rims of the jars and *pithoi*, and the raised rings inside the saucers. The shapes of the glazed fabric were similar, though less varied, and included, besides the same types of bowls and saucers, a bottle with narrow neck and pointed base. The fabric was more friable than that of the first group, and the glaze, which varied from cream or yellow to blue or green, tended to flake away. (Note that Parthian examples of (i), (ii), and (iii) also occur.)

The household vessels consisted chiefly of large *pithoi* with pointed bases and a fabric similar to, but coarser than, that of the first group.

The pottery from Ashurnasirpal's Palace and from Sennacherib's House was moderately uniform and may be treated together. All the Sargonid groups were present, although the glazed ware was scarce, but two or three shapes that were rare on the temple site occurred in both of these deposits, including bowls with flat⁵ or vertical rims, jars with a moulded ring a little

¹ See pl. LIII, nos. 135-43 (except 137).

² See pl. LIII, no. 149.

³ See pl. LIV, nos. 167-9.

⁴ See pl. LIII, nos. 124, 127, 129.

⁵ We picked up examples of this shape at Assur.

below the rim,¹ and a deep bowl with a well-marked shoulder,² found in glazed ware in the Palace and unglazed on both sites. A libation vase with wide, cylindrical neck and pointed base recalls an old Sumerian form, but the nearest parallel both in fabric and shape is the series of vases found by Layard in the Upper Chambers at Nimroud and dating from the reign of Shamshi-Adad V. A unique shape, also resembling a Sumerian type, was a pot-stand from Senacherib's House.³

Foreign. The Greek sherds from the temple site included one sub-Mycenaean, one proto-Geometric sherd, and one fragment of a Rhodian bird-bowl, and there were a few pieces of Roman *terra sigillata* of the first century A. D. I also picked up one fragment of a Milesian *oenochoe* on part of the old dump from Ashurbanipal's Palace. I am indebted to Mr. Forsdyke and Professor Beazley for their kindness in checking my identification of these sherds.

Parthian. After the sack of Nineveh in 612 B. C. the site remained deserted until the third century B. C. and probably later. During the Parthian period (200? B. C.—A. D. 226) the glazed and fine plain wares continued without much change, except that a few new shapes appeared such as the *amphora* with twisted handles,⁴ but they were accompanied by a new red-painted fabric consisting almost entirely of small, straight-sided bowls with an occasional pilgrim flask or bottle, or a lamp with a long nozzle and palmette handle. The paint sometimes covered the vase both inside and out, but was often confined to a narrow band just below the rim. The decoration consisted of incised bands and *pointillé* chevrons and occasionally of shallow grooves or running spirals.

There was no unmixed deposit of Parthian sherds, but they tended to occur along with Assyrian pottery at a depth of from 5' to 7'. To this period belonged a Parthian coin, a few pieces of *terra sigillata*, and a Greek inscription;⁵ a series of shallow saucers completely covered with a thick white glaze, which shows a surface crackling but never flakes away, more probably belonged to the succeeding period.

Sassanian. The only datable find of Sassanian times, apart from two Roman lamps of the third century A. D.,⁶ was a coarse buff-coloured jar with a rudely incised lattice pattern, containing a hoard of Sassanian silver coins of the fifth century A. D. It is, however, quite possible that some of the pottery I have classified as Parthian may really have belonged to this period.

¹ There are plenty of Sumerian and Babylonian parallels for this.

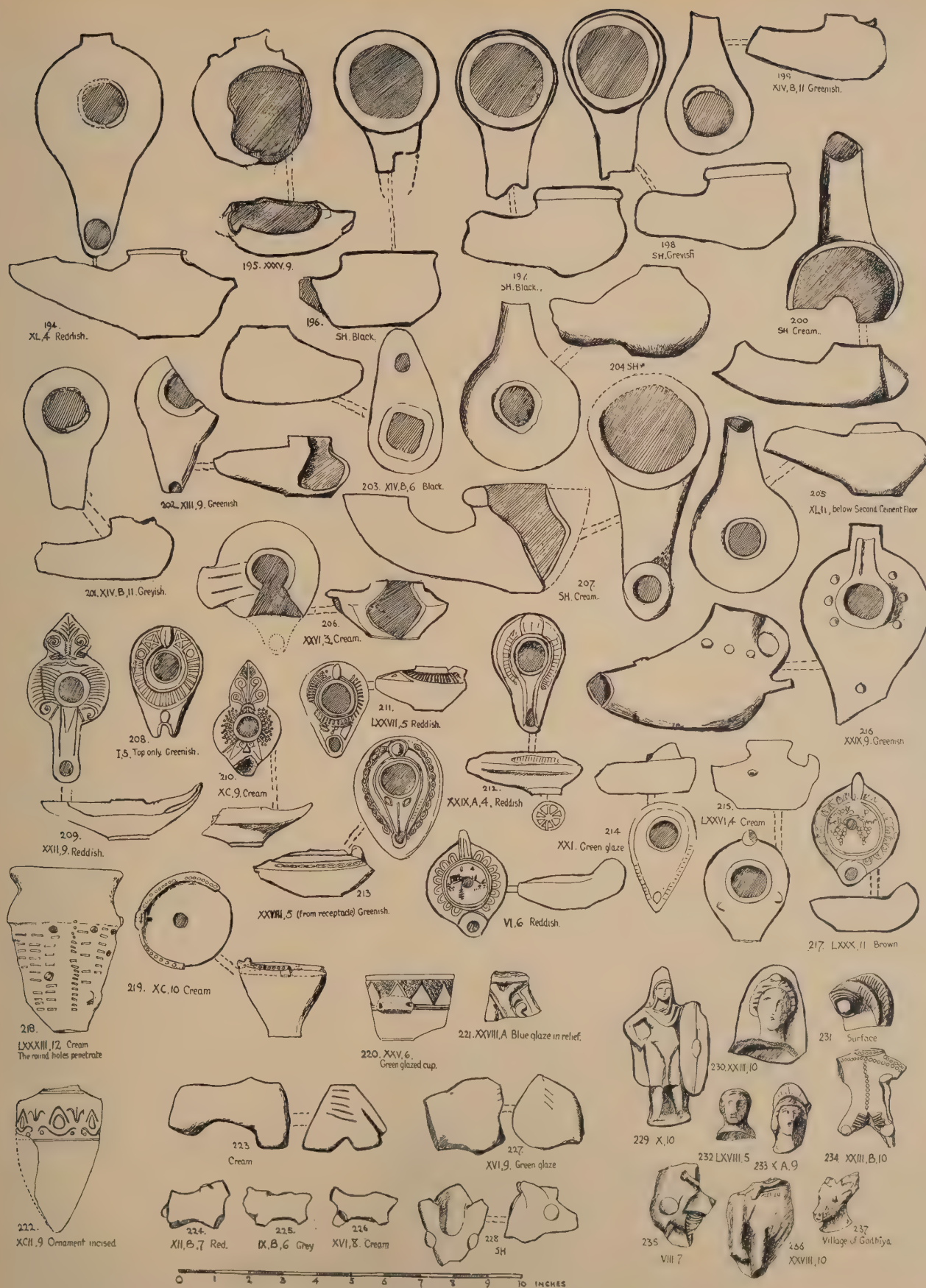
² We found sherds like this at Assur, but the form does occur on the Nabû site.

³ See pl. LIV, no. 193.

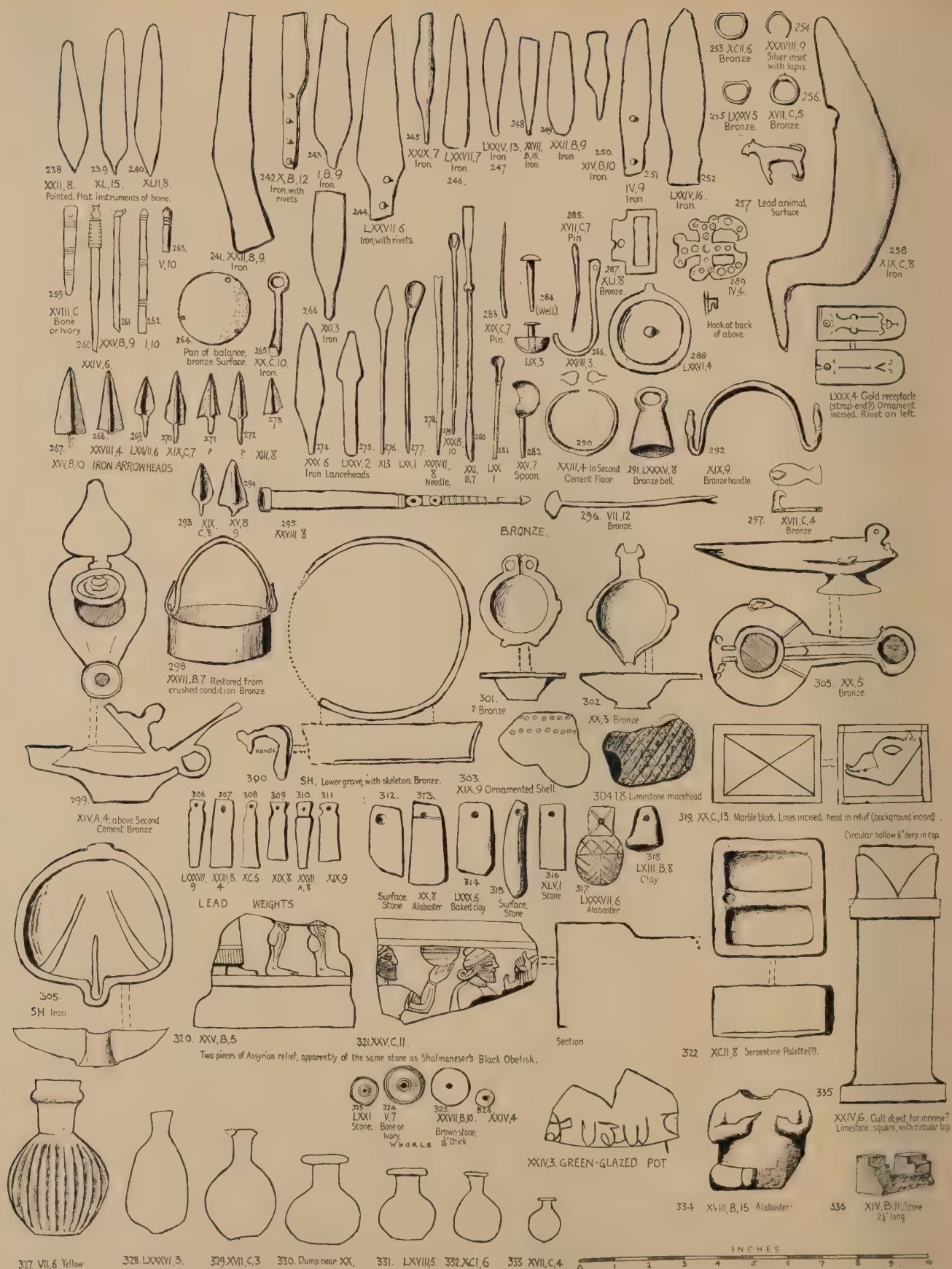
⁴ For shape and fabric, cf. *Fouilles de Doura-Europos*, pl. 118, nos. 1 and 2.

⁵ See p. 140.

⁶ We are indebted to Mr. H. B. Walters for his courtesy in checking this date.



LAMPS, ETC., FROM THE TEMPLE SITE, AND FROM SENNACHERIB'S HOUSE (nos. 196, 197, 198, 200, 204, 207, 227) Parthian, nos. 209, 210, 222, 229, 230 (?), 233 (?), 235; Sassanian, no. 212 (?); Roman, no. 217 and no. 'vi, 6'; Early Christian and Medieval, nos. 208, 211, 213, 214, 220, 221



GOLD, IRON, BRONZE, LEAD, BONE, GLASS, AND STONE FROM THE TEMPLE SITE, AND FROM SENNACHERIB'S HOUSE

Christian. The earliest Christian pottery from Kouyunjik was a white fabric adorned with stamped medallions containing Christian or Sassanian symbols such as the cross or ram, and other devices such as horses and stags. This ware was first identified in a mound near Eski Kifri by Rich, who very brilliantly classified it as Sassanian. It has also been found at Bagdad, Ctesiphon, Kushaf, Niliyah, Tekrit (with Pehlevi monograms), in ruins near Samarra,¹ and at Nimroud. The fact that it was found at Ctesiphon (sacked by Omar in A.D. 627) but not on the palace site at Samarra suggests that this fabric probably flourished during the seventh century, though it may have started earlier and lasted into the eighth. The stucco medallions from Mesopotamia, now in Berlin,² were presumably contemporary, and the prototype of this form of decoration may have been the medallions on the metal bowls classified as Parthian by Strzygowski, and by Sarre as Sassanian-Hellenistic.

At Kouyunjik this fabric was rare and never occurred in a pure deposit.

The next period seems to be represented by a series of jugs, of which the upper part was covered with floral patterns in the barbotine technique. It was principally found in two refuse pits, considerably below the floor level of the temple, but there was a small deposit, possibly still *in situ*, level with the great south-east pavement of Ashurbanipal. The only stratigraphic evidence for its date is the fact that it was absent from the cement buildings, and indeed never found with any pottery except Assyrian. The same fabric, however, has been found at Shaddadah and in some of the houses at Samarra. Both shapes and ornaments were obviously derived from a group of metal vases classified by Sarre as Late Sassanian or Early Post-Sassanian.³ A fragment of a jug in the Hermitage Museum⁴ has a row of musicians on the shoulder, a typically Sassanian *motif*. Stylistically this fabric appears to fill the gap between the stamped vases and the glazed pottery of the cement buildings, and may therefore be tentatively assigned to the eighth and ninth centuries A.D.

The latest pottery from the temple area, apart from a few modern sherds, was that from the Syriac-speaking settlement represented by the six cement floors. Wedged between the sixth and fifth floors was a sherd with brown and green spots, and a *graffiato* scroll pattern under a clear lead glaze, a Mesopotamian imitation of the T'ang stone wares in China. Professor Sarre dates a similar fragment from Samarra as late as the thirteenth century, though he admits that on grounds of style alone he would have assigned it to the eleventh

¹ Professor Sarre's II B ware in *Die Keramik von Samarra*, pl. III.

² Strzygowski, *Altai-Iran und Völker-wanderung*, figs. 184, 185, and 186.

³ Sarre, *Die Kunst des alten Persiens*, fig. 142.

⁴ Strzygowski, *Altai-Iran und Völker-wanderung*, fig. 214.

or twelfth;¹ for various reasons, however, I believe that our fragment is not much later than the tenth century.

The Fifth to the Third Cement floors inclusive were associated with a large number of sherds with the following chief varieties: (a) a mottled *graffiato* like that described above, but varied sometimes by the omission of one or more of the colours; (b) a brown glaze incised after glazing; (c) a little Mesopotamian lustre ware; (d) a fine blue faience known but not common at Rakka; and (e) some unglazed water-jugs with plastic decoration, the so-called Mosul jugs. The shapes consisted chiefly of deep bowls and saucers with out-turned rims. A sherd resembling the blue glaze typical of Sultanabad was found embedded in the Fourth Cement, and a somewhat similar sherd in the suburb south of the Gate of Assur. The plain vases of this period included cylindrical *pithoi* coated inside with bitumen, and small water-jugs, not unlike the modern variety.

The pottery from the Second Cement building showed no material change except that the Mosul jugs and blue glaze seemed to be more common, and the mottled ware coarser than before. Very few sherds were associated with the First Cement, but the typical ware seems to have been a green *graffiato* which had already appeared in the earlier strata.

The occupation of our site probably continued till the invasion of Genghiz Khan in 1220 or of Hulagu Khan in 1250, and at latest can hardly have survived the campaign of Timur in A. D. 1380, when all the Christians left alive fled to the hills.

(L) THE GREEK INSCRIPTION

This Greek inscription from the Nabû temple was discovered during the 1904 excavations at a depth of about 4' above the floor of the central court. The inscription was written on a cylindrical stone, and shows traces of what appear to be an earlier inscription in smaller characters, of which only a few are still visible. The present locality of the stone is unknown, and the provisional text offered here is based on a study of the photograph taken in 1904:²

¹ Sarre, *Die Keramik von Samarra*.

² I am indebted to Mr. A. M. Woodward for the first transcription of the text, to Professor Hunt for the suggestion of two or three words, to Mr. Tod for a reference, and to Mr. E. G. Campbell for criticizing my account.



338. XXII, 10-12. Marble

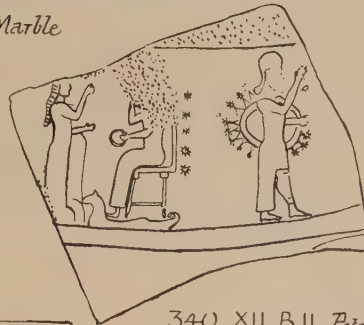
342. Seal Impression
Clay



345.
XXIV, B, 6
Blue glaze



344. XXVIII, 8
Lapis



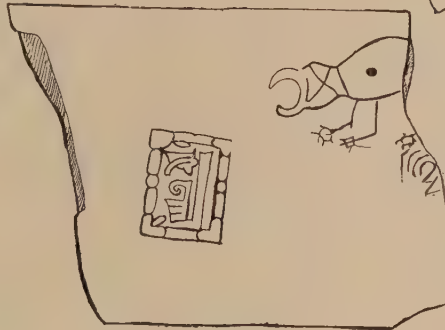
340 XII, B, II. Polished

337. XXIII, 9 (4' under Second Building)
Blue-Green Glaze.



343. LXXX, 12. Ivory.

Scale 0 1 2 3
INCHES



339 XXIII, 3 Steatite

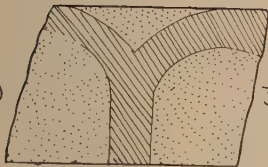


XXXII, 8 Green Stone Agate, gold.
XXVII, B, 8 Agate, unboiled gold.
XXXII, 10. XXXIII, 8. Shell, gold.

Nos 346-349

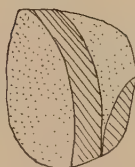
Scale 0 1 2 3 4 5
INCHES
For Nos. 338-349 (except 343)

350



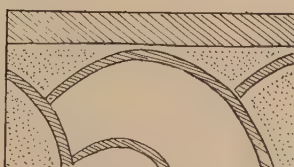
XXXIV, 4. Green and Yellow

351

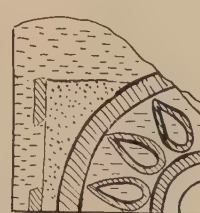


Temple, Green and Yellow

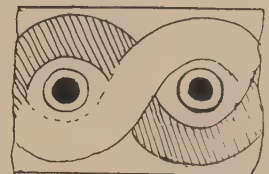
352



XXIV, B, 10. Green, white, and Yellow

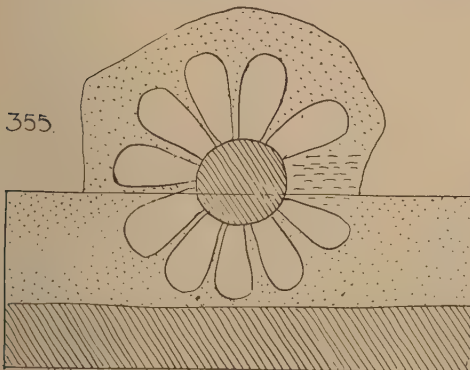


353. S.E. Gate of Temple, Green and Yellow, yellow outlined with brown



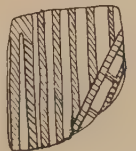
354. Near Well. Yellow, Black and White.

355.



S.W. Gate of Temple, Green and Yellow.

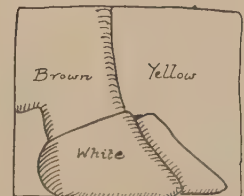
356



Surface Yellow, outlined with red



357. Temple. Blue, Yellow and White



358. Near Ashurnasirpal's Palace (high relief)

Blue Green Yellow

Scale 0 1 2 3 4 5
INCHES

POTTERY, STONE OBJECTS, BEADS, AND PAINTED BRICKS FROM ABOVE OR NEAR THE TEMPLE SITE

Published by the Society of Antiquaries of London, 1929



Fig. 1. Stone work at Ashur for comparison with the dam



Fig. 2. Dam at the Agammu pool



Fig. 3. Shrine (?)

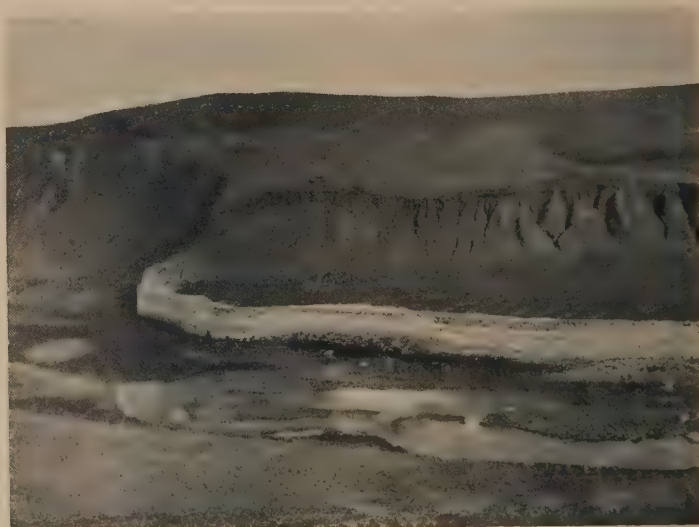


Fig. 4. Dam at the Agammu pool



Fig. 5. Dam at the Agammu pool

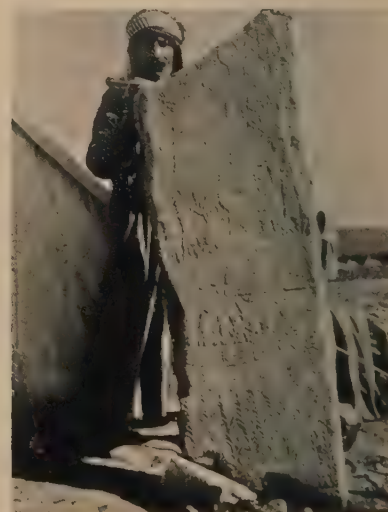


Fig. 6. Sculpture of Sennacherib's campaign in the marshes



Fig. 1. Kouyunjik



Fig. 2. Guardian deity, probably from Ashurnasirpal's palace



Fig. 3. Sargon's pavement



Fig. 4. Ashurnasirpal's lion hunt



Fig. 5. Ninlil Gate in the walls of Nineveh on the Khosr

Block kindly lent by R.G.S. Scotland



Fig. 6. Ashurbanipal's pavement



FLINT AND OBSIDIAN IMPLEMENTS, POTTERY, ETC.

Published by the Society of Antiquaries of London, 1929

ΕΤΟΥΣΑ ΤΣΑ	*Ετους α τ(?)σα
ΤΙΝΑ ΘΕΩΝ ΕΠΗΚΟ	θεῶν ^{τινα} ἐπηκό[ων]
ΑΠΟΛΛΟΦΑΝ	Ἀπολλοφάν[ης]
ΑΣΚΛΗΠΙΑΔΟΥ	Ἀσκληπιάδου
ΥΠΕΡ-ΗΣΑΠΟΛΛΩΝΙΟ	ὑπὲρ τῆς Ἀπολλωνίου[υ]
ΤΟΥΣΤΡΑΤΗΓΟΥΚΑΙ	τοῦ στρατηγοῦ καὶ
ΕΠΙΣΤΑΤΟΥΤΗΣ-ΠΟΛΕΩΣ	ἐπιστάτου τῆς πόλεως
ΤΕΤ ΜΕΝΟΥ+ΚΑΙΕΠΙ	τετ[αγ]μένου καὶ ἐπί
Ν Η'ΙΣ ΔΕΧ(?)	? ν ? η ? ε ?
ΩΝ ΓΑ ΚΑΙ	? ων ? ?
^Μ ΕΑΥΤΩΕΥΕΡΓΕΤΟΙΣ Α -Ω	ἑαυτῶ εὐεργέτου σ ?
ΚΑΙΤΩΝ Τ ΚΑΙ	καὶ τῶν τ[έκνων] καὶ
ΑΔΕΛΦΩΝΚΑΙ ΝΩΝ	ἀδελφῶν καὶ [ἐγγό]νων
ΚΑΙΤΗΣΠΟΛΕΩΣ ΕΙ	καὶ τῆς πόλεως ? εἰ
ΤΟΥΚΑΙΤΩΝΠΑΙΔΙΩΝ	[ἑαυ]τοῦ καὶ τῶν παιδίων
ΩΝ Κ' Α Ξ	? ων κ' α ?

The earlier inscription cannot be recovered, and the information afforded by the letters *τινα* above the second line of the later one could hardly be more indefinite. The later text seems to have been a dedication by one Apollopheanes the son of Asklepiades on behalf of a certain Apollonios to the θεοὶ ἐπήκοοι, and the general sense might be as follows: 'In the year . . . in honour of the Attentive Gods Apollopheanes, the son of Asklepiades, on behalf of Apollonios governor and president of the city, in charge also of . . . benefactor (?) of himself, his children, brothers, and kinsmen (?) and of the city . . . of himself and of his children . . . [has set up?]'

The letters, which are well cut, are of the usual Ionic type save that the π with equal arms, the straight μ and ς, and especially the Α with broken cross-bar and the extension of the φ above and below the line imply a date not earlier than the second century B.C. and most probably later. The dialect is the ordinary *koine* without any local idioms, and the phrasing resembles Parthian examples of the second century A.D. from Doura-Europos.¹ The office of ἐπιστάτης was at Doura and elsewhere a typically Parthian institution, but an inscription from the reign of Antiochos IV Epiphanes from Babylon proves that it was known in Seleucid times.² (The ἐπιστάται at Athens performed

¹ Cumont, *Fouilles de Doura-Europos*, nos. 91 and 118.

² Dittenberger, *Orient. Graeci. Inscript. Select.*, no. 254.

quite different functions.) The only clue to the exact date lies in the letters immediately following *ετους* in the first line; if the third letter was a *τ* we should have the year three hundred and something, presumably of the Seleucid era. There is no certainty, but a date in the middle of the first century A. D. would agree very well with the other evidence.

The *θεοὶ ἐπήκοοι* of the second line are rather obscure. *Ἐπήκοος* in the singular was used of many deities and especially of Aphrodite, Apollo, Artemis, and Asklepios;¹ in the plural form it was applied to Zeus and Hera at Sophia; to Ahuramazda, Mithras, and Verethragna by Antiochos of Commagene; and in a few instances without any names being specified.² It has been suggested to me³ that some vague tradition of sanctity might have persisted on the site of the Nabû temple and that this might be a dedication to the 'unknown gods' of the locality.

The only other⁴ Greek inscription known from Nineveh was a list of Macedonian months (*C.I.G.* 4672) and dated to the third century A. D. It was found by Dr. Wilson and published by W. R. Hamilton in volume iii of the *Transactions of the Royal Society of Literature*, but was omitted from the otherwise excellent list of Greek inscriptions from Mesopotamia given in the book on Doura-Europos.

(M) BEADS⁵

The beads discovered by Dr. Campbell Thompson were divided between the museum at Bagdad and the British Museum. As the Bagdad portion was not sent to this country I am unable to say anything about them, and can only describe those in the British Museum.

The site has been so turned over that the position where a bead has been found is of very little use for showing its date, several of the earliest beads having been found only a few feet below the surface. Any suggestions of dates given below are, therefore, derived from comparison with beads of known dates from other places.

The more interesting beads are mentioned below, arranged according to their material.

Agate, etc.

A fine specimen of onyx barrel with gold caps (fig. 2*a*). Such beads were frequently made during the Persian period.

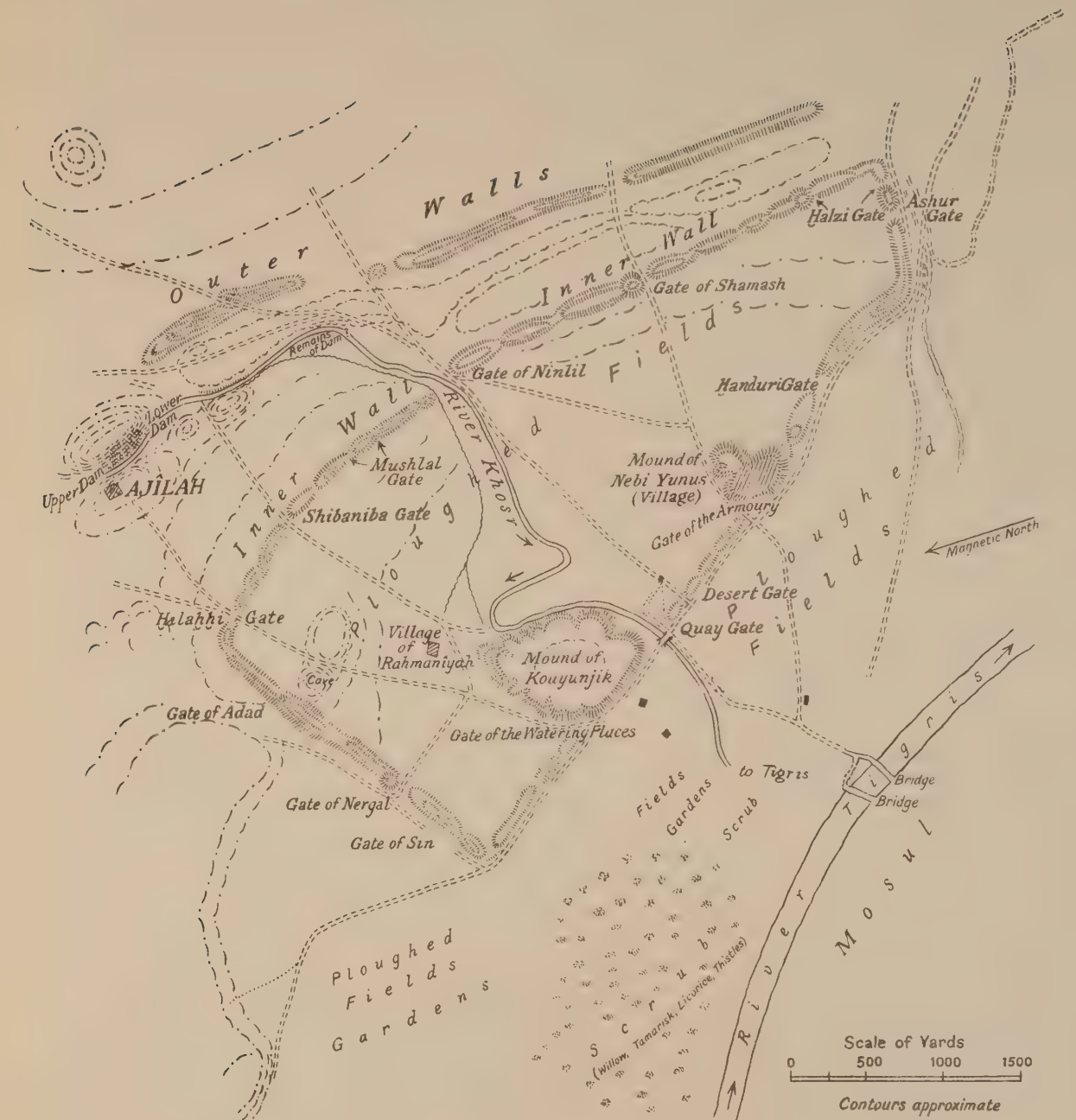
¹ Weinreich, *Θεοὶ Ἐπήκοοι*, *Ath. Mitt.*, 1912.

² Weinreich, *loc. cit.*, nos. 92, 93, and 94.

³ By Mr. A. D. Nock.

⁴ Except that on the Herakles Epitrapezios.

⁵ The following description of the beads is by Mr. H. C. Beck, F.S.A.



GENERAL PLAN OF NINEVEH



PLAN OF THE MOUND OF KOUYUNJIK
(Begun by Dr. L. W. King in 1904)

Published by the Society of Antiquaries of London, 1929

An interesting compound eye-bead (fig. 2 *b*) is made with a white agate back plate, on to which is cemented an obsidian front so as to represent one of the typical onyx eye beads.

Two irregular agate pebbles, perforated, but not otherwise worked.

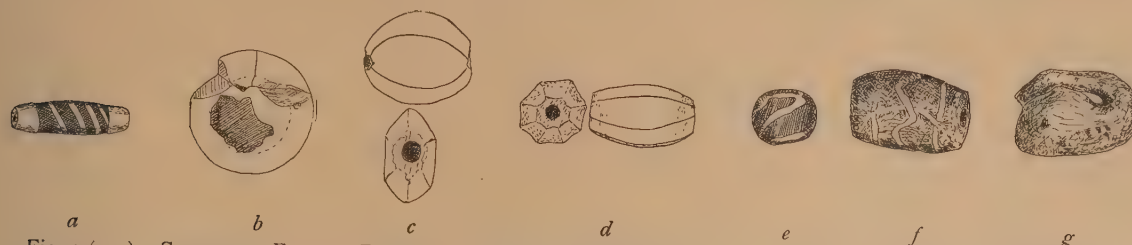


Fig. 2 (359). STONE AND FAIENCE BEADS: *a*, agate barrel with gold caps; *b*, composite eye-bead; *c*, hexagonal barrel of carnelian; *d*, fluted octagonal barrel of carnelian; *e*, *f*, etched carnelians; *g*, faience duck.

Amazonite, or Microcline Felspar.

One barrel bead and two elliptical barrel beads.

Amber.

Parts of two faceted amber pendants were found. These are too fragmentary to show their original shape, but they are very similar to the Etruscan amber work.

Amethyst.

The only amethyst bead found is a fine bicone; the angle on the profile is 90°. This is suggestive of the XIIth dynasty Egyptian work, but the angle is unusually acute.

Calcite.

A rough elliptical barrel was found. This bead suggests a very early period.

Carnelian.

The majority of the beads found are of this material. Many are very rough in workmanship, but this does not always mean an early date. The following are of interest:

Two hexagonal bicones of a special type found in considerable numbers at Mycenae (fig. 2 *c*). These were probably imported from the Aegean about 1200 B. C.

A fluted octagonal barrel (fig. 2 *d*). In this the surfaces are concave.

Two etched carnelian beads (figs. 2 *e*, 2 *f*). The method by which this is done has been described by Mackay in the *Asiatic Journal*, who says that carbonate of soda and great heat were used. Some doubt has been thrown on his suggestions, but I have myself successfully produced similar patterns in

this manner. These beads are of great interest as the process was extremely local, being practically confined to Mesopotamia, India, and Russia, although a few rather doubtful specimens are stated to have come from Egypt. Almost all the specimens found in Mesopotamia are definitely associated with a very



Fig. 3 (360). FAIENCE AND FRIT BEADS: *a*, black faience melon bead; *b*, blue faience melon bead; *c*, faience scarab; *d*, *e*, frit scarabs; *f*, blue and yellow frit barrel bead.

early period, but the method was continued in India and Russia to at least the middle ages, and I think that these specimens from Nineveh are not early; in fact one specimen was associated with a Roman fibula.

Faience.

Although very few beads of this material were found, they show great variety.

A small faience model of a duck (fig. 2 *g*) is made of a hard grey faience which has bubbled very much in making.

A large black melon bead (fig. 3 *a*) has fifteen gadroons; the top of these is rubbed off showing a brownish-grey core.

A smaller blue melon bead (fig. 3 *b*) is made of the pale blue faience found at Ur, which is there associated with the IIIrd dynasty of Ur and earlier periods.

A scarab of soft buff-coloured faience (fig. 3 *c*). The shape of this suggests Egyptian manufacture, but the material is unusual and the six-pointed star is an Assyrian device.

Frit.

Two blue frit scarabs, one with a design of a double cross (fig. 3 *d*), and the other with a design which may have represented a figure on horseback (fig. 3 *e*), were probably made in Egypt, and if so date from 1000 to 600 B.C.

A number of small frit beads, chiefly cylinders, were found.

A very unusual bead (fig. 3 *f*) is a barrel bead which is apparently made of two kinds of frit, blue and yellow mixed together.

Garnet.

One small spherical and four small oblate garnet beads were found.

Glass.

The soil in Mesopotamia seems to be very bad for the preservation of glass, most of the specimens being in an advanced state of decomposition. There are, however, some notable exceptions, various specimens of widely different dates being well preserved. The following are the more important:

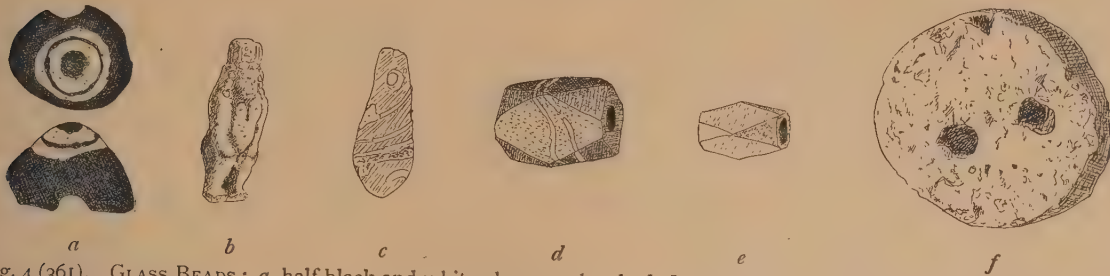


Fig. 4 (361). GLASS BEADS: *a*, half black and white glass eye-bead; *b*, figure of Bes in amber glass; *c*, glass pendant; *d*, glass cornerless cube bead, imitating onyx; *e*, glass cornerless cube bead; *f*, plaster or gypsum button.

Half a triangular stratified eye-bead of black and white glass (fig. 4 *a*). This is a typical example of a bead found extensively in the Aegean and South Italy, where it dates from 800 to 600 B.C.

A glass figure, probably Bes (fig. 4 *b*). This is an amber glass with blue iridescence and may be of Egyptian origin, but as the technique is unlike Egyptian work I think it is more probably Aegean or Phoenician work of from 700 to 400 B.C., as very similar figures are found at Tharros.

A pendant with spiral line round (fig. 4 *c*). This is of amber-coloured glass with a very beautiful green iridescence. It also is a type of pendant that is found in the Aegean about 600 B.C., but there is not at present any definite information as to its place of manufacture.

Cornerless cube bead imitating onyx (fig. 4 *d*). This bead is made of very dark blue, almost black, glass with bands of white glass, so as to look like onyx. The glass has been moulded round a rod, and then all the outside surfaces have been ground and polished. A smaller bead (fig. 4 *e*) without the white band has been made in the same way. These probably date from 600 to 400 B.C.

A large flat eye-bead. This is almost corroded away, but enough remains to show that it was elliptical and perforated at each end so as to form a centre-piece in a necklace. A large circular ring of a different glass was impressed on this so as to form a large eye. Owing to the almost complete corrosion it is not possible to state the original colour of the glass. It was about $1\frac{1}{2}$ " long and $1\frac{1}{4}$ " wide.

Two large oblate beads of black glass about 0.8" diameter. These are not very badly corroded and retain a considerable amount of the original polished surface.

Gypsum.

Several large buttons were found (fig. 4*f*). These are made of a form of gypsum which has been made plastic, the articles having been moulded.



Fig. 5 (362). IVORY AND STONE BEADS: *a*, fragment of ivory bead; *b*, astragalus of lapis; *c*, quartz fire-polished bead; *d*, serpentine spacing bead; *e*, steatite seal; *f*, steatite mould for ear-ring.

Also there is some evidence of bubbles on the surface. These facts suggest very forcibly that a form of plaster of Paris was made and used. On the other hand, the microscopic structure, whilst corresponding to certain kinds of natural gypsum, does not agree with that of freshly made plaster of Paris. It has been suggested that one explanation is that in the course of thousands of years the structure of plaster of Paris becomes more similar to gypsum formed naturally. Another suggestion is that in early days a different kind of cement was made with gypsum which is not now known. In either case the matter is of great interest.

There are also some very small short cylinder beads of gypsum, which are now in a very fragile condition, and it is not certain whether they are also made from plaster or cut from the stone.

Ivory.

Only one half-bead of this material was found (fig. 5 *a*). It is very similar to some of the Aegean beads.

Lapis Lazuli.

Several small beads of lapis were found. The most interesting is the small model of an astragalus (fig. 5 *b*). There is no evidence for the date of this, but several of the small beads are very similar to those found by Woolley in the graves of the earliest period at Ur, and may be early Sumerian.

Limestone.

A very fine limestone bead was found. It is 1.55" long and 0.9" diameter in the middle and 0.65" at the ends. The workmanship is very good.

A red breccia cylinder bead 1.2" long and 0.4" diameter shows great signs of wear. It may date from the neolithic period and has some resemblance to pre-dynastic Egyptian work.



Fig. 6 (363). SHELL BEADS: *a*, *Cypraea annulus*; *b*, *c*, *Cypraea moneta*; *d*, *Pusiostoma mendicaria*; *e*, *Euthria cornea*; *f*, *Trochus turbinatus osilinus*.

Obsidian.

In addition to the chalcedony bead with obsidian front mentioned before, a barrel bead 0.65" long and a small oblate bead of obsidian were found.

Ostrich Shell.

A number of small disc beads of ostrich egg-shell were found, and one large disc bead which is very chipped both round the perimeter and the perforation. This is very like some of the neolithic beads from the Sahara.

Quartz.

The only quartz bead found was one of the small disc beads with very highly polished but irregular surface (fig. 5 *c*). Many of these beads have been found at Ur, and the technique is the same as the little quartz shield-shaped pieces which date from the IIIrd dynasty of Ur (about 2300 B.C.). Examining the surface shows that some sort of fire polish has been used. I suspected that lime was used. Sir Herbert Jackson, however, settled the matter by a new method of spectroscopic examination which he has perfected. He found that there was no lime in the surface, in fact less than in many pieces of natural quartz; but he discovered that there was a very large quantity of soda in the surface and scarcely any in the inner part of the bead. This definitely shows that some form of soda has been added, possibly by painting soda carbonate and then heating.

Serpentine.

The most interesting serpentine bead found was a small spacing bead (fig. 5 *d*). In this the two holes were only drilled half-way through the stone, and a groove was cut on the other side until it met them.

Steatite.

A steatite lion seal (fig. 5 *e*) is a fine specimen of steatite carving. It is almost certainly of Egyptian manufacture and dates between 1300 and 1000 B.C.

A mould for making gold pendants (fig. 5 *f*) was found. Ear-rings of this form were worn for a long period, so the date of the mould might be anywhere between the eighth and third century B.C.

Shells.

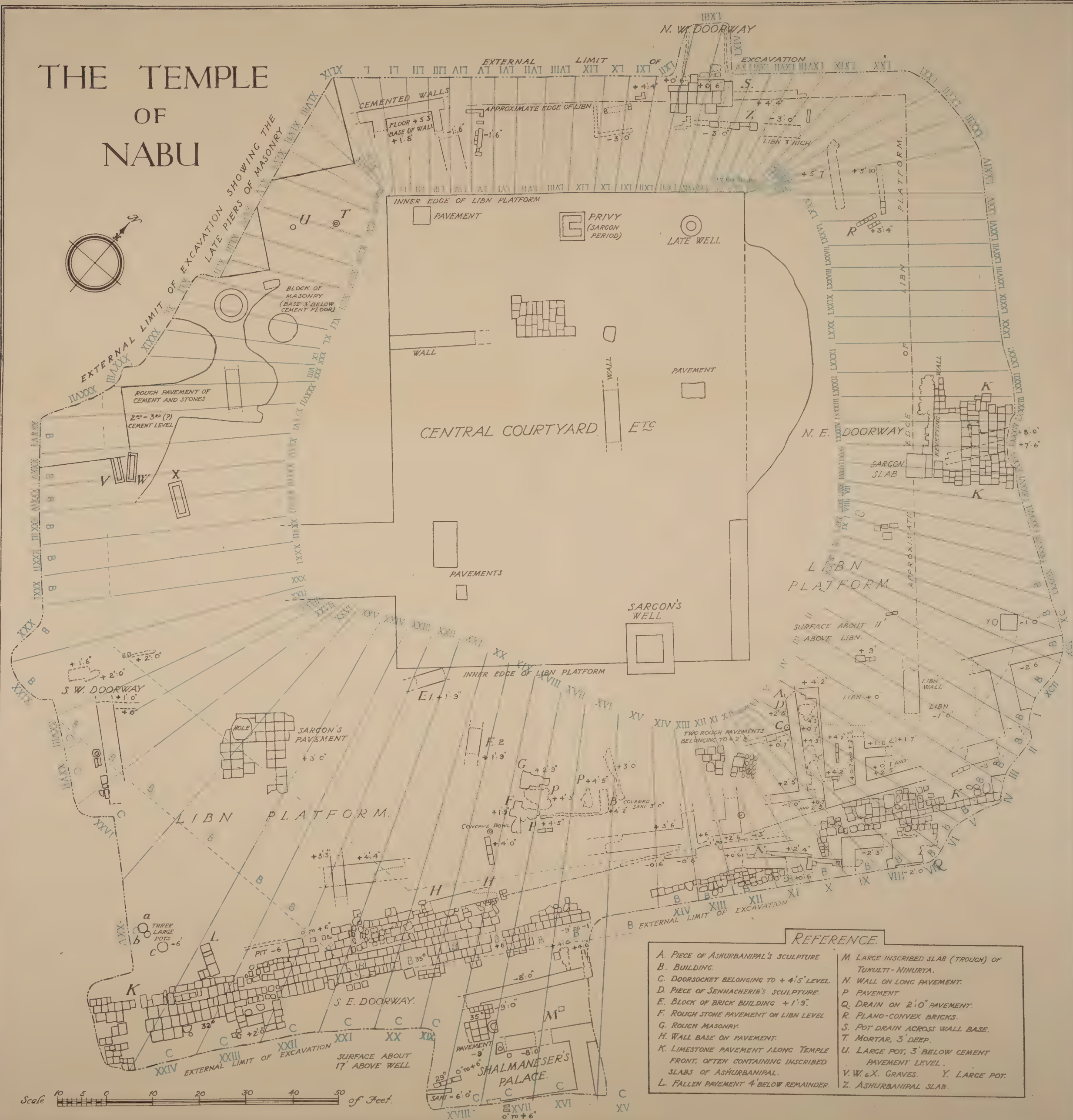
Mr. J. R. le B. Tomlin, of the British Museum, South Kensington, very kindly examined the shells found. He states that there are six sorts from the Indian Ocean or Red Sea, *Ancilla ampla* (Gmellin), *Cypraea annulus* (L.) (fig. 6 *a*), *Cypraea moneta*, the money cowry (figs. 6 *b*, 6 *c*), *Donax paxillus* (Reeve), *Pusiosstoma mendicaria* (L.) (fig. 6 *d*), and a species of dentalium. There are three species confined to the Mediterranean or Atlantic—*Euthria cornea* (fig. 6 *e*), *Ocenebra edwardsii*, and *Trochus turbinatus osilinus* (fig. 6 *f*). There were also two species of freshwater shell—*Melanopsis costata* (Fer.) and *Unio* sp. (?)

Amongst the odd stone beads is a plano-convex barrel of hard stone with a brilliant yellow vein through it. Dr. Thomas of Jermyn Street Museum and Dr. Campbell Smith at South Kensington are both very puzzled by this specimen: the only suggestion they can make is that it must be some form of yellow chalcedony, although no such material has previously been found.

ERRATA IN THIS ARTICLE

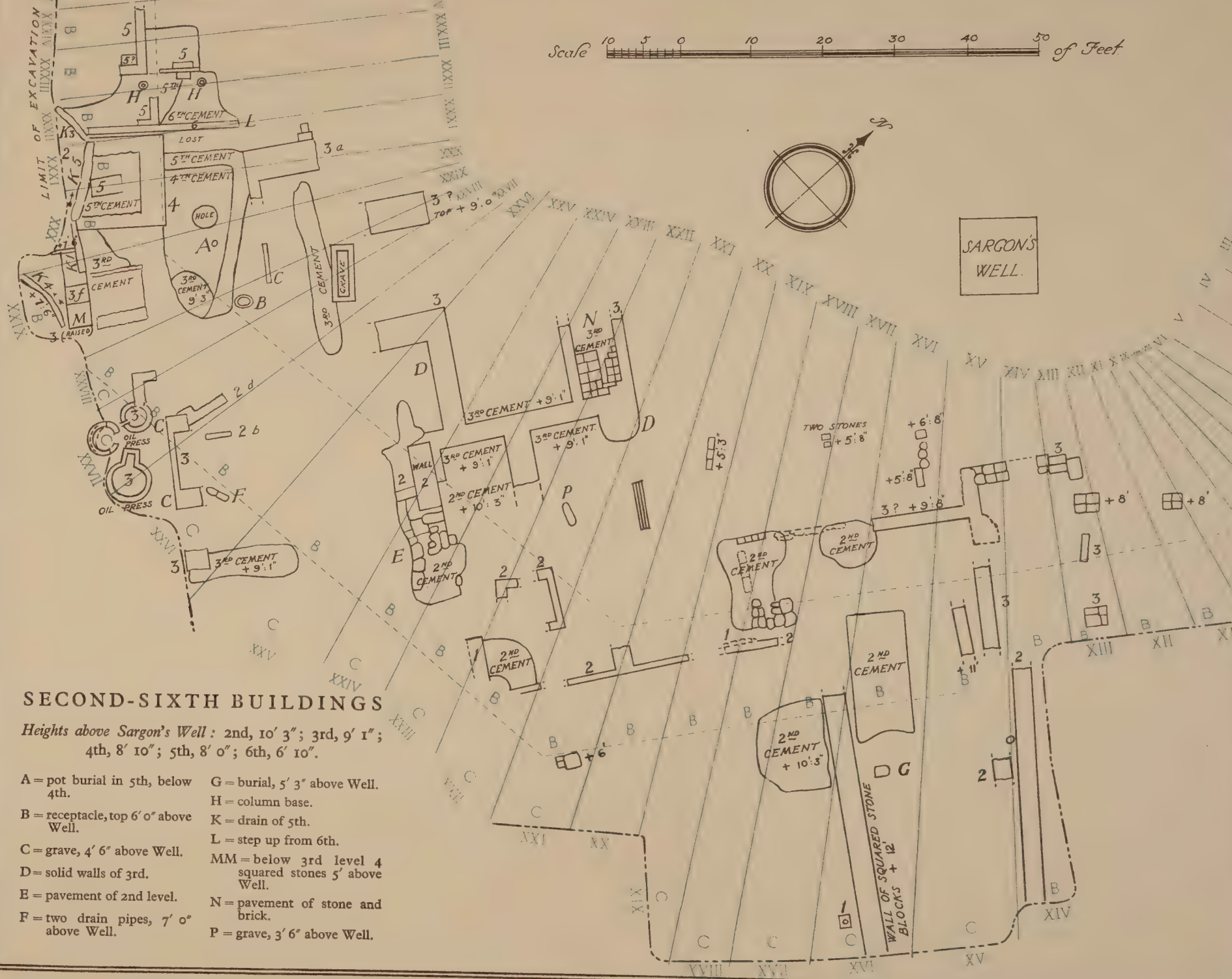
For 'Ajilah' read 'Jilah', and for 'Tell Gintarah' or 'Gintarah' read 'Mound No. 3' *passim*. Jilah takes its name from the name of a grey clay found locally, which is used for washing clothes. Gintarah (the name of a small hillock not far distant) was incorrectly assigned to 'Mound No. 3'.

THE TEMPLE OF NABU



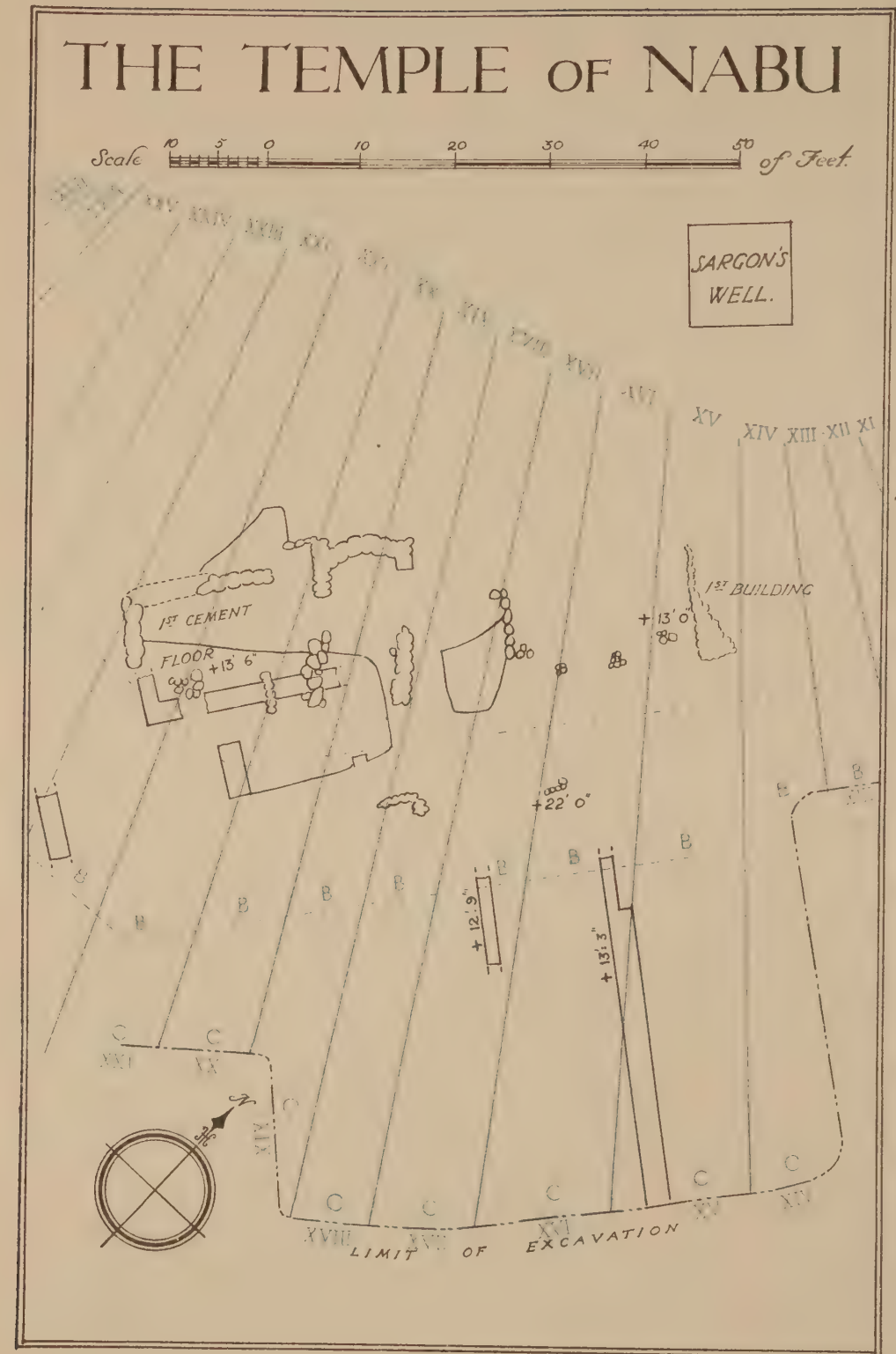
THE TEMPLE OF NABU.

Scale 10 5 0 10 20 30 40 50 of Feet



SECOND-SIXTH BUILDINGS ABOVE THE TEMPLE OF NABU





FIRST BUILDING ABOVE THE TEMPLE OF NABU

VIII.—*The Epigraphy of Medieval English Seals.*
By H. S. KINGSFORD, Esq., M.A., Assistant Secretary.

Read 6th December 1928

It has generally been accepted as an axiom that the date of a seal can be determined within close limits by the style of the lettering of its legend. The late G. Demay, in his *Inventaire des sceaux de la Normandie*, published in 1881, was the first to give serious attention to the subject, and he naturally drew his material almost entirely from French sources. In 1887 the late Sir William Hope, in his paper on the *Seals of English Bishops*,¹ offered some suggestions as to the date of the different styles of lettering, basing his conclusions on the fact that a bishop's first seal must be of the same date as his appointment to his see. His classification was as follows:

- (1) 1072-1174. Roman capitals.
- (2) 1174-1215. Rude Lombardic.
- (3) 1206-1345. Good Lombardic.
- (4) 1345-c. 1425. Bold black letter.
- (5) c. 1425-1500. Fine close black letter.
- (6) After 1500. Roman capitals.

In this classification Sir William was under the disadvantage of basing his conclusions on too few examples and perhaps on too restricted a class. In the forty years since his paper was printed the material available for study has increased enormously, and it now seems possible to attempt a corpus of the lettering on datable English medieval seals from the Conquest to the accession of Elizabeth.

At the outset it is necessary to define very clearly the material used. In the first place this inquiry has not been carried back beyond the Conquest, for the reason that, of the pre-Conquest seals known (a dozen at most), several are suspect and few can be dated exactly. Secondly, only those seals have been selected which can be dated either with absolute precision or so nearly as for all practical purposes to be considered absolute. Such dating can be arrived at in the following ways:

(i) *By the date being given in the legend.* Examples are: St. Austin's Abbey, Canterbury, dated 1199; Winchester Cathedral Priory, second seal,

¹ *Proc. Soc. Ant.*, xi, 271.

dated 1294; Reading Abbey, second seal, dated in a rhyming couplet 1328; Thomas Beauchamp, earl of Warwick, dated 1344; and Trinity College, Cambridge, dated 1546.

(ii) *By the date being given elsewhere on the matrix.* Examples are: Dover Corporation, dated on the back 1305, and Fountains Abbey, dated 1410, although Mr. Clay has recently shown that the date on this matrix may not be that of its manufacture, which was possibly a year or two later.¹ Mr. Hill has also pointed out that in Germany, at all events, these dates may sometimes be assigned to the incorporation of a town or the grant of its arms.² So some caution is necessary.

(iii) *By entries in accounts or records.* Examples of the former are common in the Issue Rolls and in municipal accounts. Examples of the latter are the entry in the Close Roll of 1218, ordering payment to Walter de Ripa for making the first Great Seal of Henry III, and the statement in the *Annals of Waverley* that the new seal of Merton Priory, Surrey, was taken into use on the eve of the feast of St. Lucy, 1241.

(iv) *By an Act or Ordinance authorizing the use of a seal.* Examples are the seals provided under the Statute *de Mercatoribus* of 1282 and its extensions, the Ordinances of the Staple of 1353 and later, and the Statute of Labourers of 1388.

(v) *By the beginning of a reign.* It is obvious that on his accession the sovereign had to be provided with a Great and other seals, and, unless there is good ground for a contrary opinion, his first seals may be dated in the first year of his reign. A certain amount of caution is, however, necessary. Until his own seal was ready a sovereign generally continued to use his predecessor's. Sometimes he never used any other, or he merely altered the name or made some slight addition by way of difference. Henry III too, as has just been observed, did not have a seal of his own until nearly three years after his accession. But with these provisos the year of the beginning of a reign may be taken as the date of the first seal, and the dates of later seals can generally be fixed by documentary or other evidence.

(vi) *By the date of the appointment of a bishop or official.* As Sir William Hope observed, the date of a bishop's first seal must be that of his appointment to his see. Here again a little caution is necessary. A bishop sometimes, although rarely, adapted his predecessor's seal to his own use, as Cranmer adapted Wareham's for his first seal; or on his translation he occasionally translated his seal with him, making the necessary alterations. This was done by Fordham on going from Durham to Ely in 1388, when he altered the name of the see, turned SS. Oswald and Cuthbert into SS. Peter and

¹ *Arch.*, lxxviii, 17, n. 1.

² *Ibid.*, lxii, 144.

Etheldreda, changed the bearings on one shield of arms and re-cut the other. Barnett too, on being translated from Worcester to Bath and Wells in 1363, used his old seal, but only had to alter the name of the see. This is a particularly instructive seal in the present connexion, as the original legend is in Lombardic capitals and the alteration in black letter. In the British Museum catalogue¹ this seal is referred to Harewell, and this ascription has been followed elsewhere; but Sir William Hope noted² that he had seen an example at Wells appended to a deed of Barnett's dated in the third year of his translation (1366).

Where the date of the appointment of an official such as an archdeacon or admiral is known, this may confidently be taken as the date of the seal.

The lettering used on seals is of three kinds: Roman capitals, Lombardic capitals, and black letter. The term Lombardic is an unfortunate one, but is now so consecrated by usage as to make its disuse difficult if not impossible. Various alternatives have been suggested, such as Uncials or Majuscules, but these all have a special meaning of their own. Professor Minns has suggested to me the term Swelled capitals, but until some such term as this is generally accepted it seems better to retain Lombardic, unsatisfactory though it be.

It will now be necessary to consider each letter of the alphabet in detail and to endeavour to point out the various changes in form which they have undergone. No attempt is made in this paper to trace the origin of the various letters, as that is primarily a matter for the palaeographer. With regard to the diagrams it should be understood that these do not claim to be absolute facsimiles of the originals, but only an attempt to define the characteristics of each letter.

A

The earliest A is on the first Great Seal of William the Conqueror (1066); it is an ordinary Roman capital with no ceriphs. But in his second seal (1070) the letter approximates much more closely to the Lombardic form, having a long top bar. The letter on William II's seal (1087) is nearer to the Roman, although it has a rudimentary top bar. These two forms continue concurrently for about fifty years. The seal of Alexander, bishop of Lincoln (1123), shows an important change. Not only has the letter the long top bar, but it has also a broken cross-bar, and this peculiarity is also found in the second Great Seal of Stephen (1143), in the seal of Roger, bishop of Worcester (1164), in the first Great Seal of Richard I (1189), in the seal of Hubert Walter, archbishop of Canterbury (1193), in the second Great Seal of Richard I (1198),

¹ *B.M. Cat.*, 1425.

² MS. note in his copy of the British Museum Catalogue now in the possession of the writer.

and in those of Nicholas of Meaux, bishop of Man (1203) and of Stephen Langton, archbishop of Canterbury (1207). The broken cross-bar is thus found for a period of just over eighty years, from the first quarter of the twelfth century to just after the beginning of the thirteenth.

Another important point is the curving of the left leg. This is probably to be seen in the seal of Roger de Pont l'Evêque, archbishop of York (1154), and certainly in that of Richard, archbishop of Canterbury (1174). It is next found on the second Great Seal of Richard I (1198), together with the broken cross-bar type, on the first Great Seal of Henry III (1218) and on that of Richard Grant of Wethershed, archbishop of Canterbury (1229), but is not again found until Henry III's so-called third seal (1263). After that it continues spasmodically until legends in Lombardic capitals went out of fashion, towards the end of the fourteenth century.

The black letter form is first found on the seal of Thomas Hatfield, bishop of Durham (1345), the earliest seal with a black letter inscription. Its shape is practically invariable and it continues until Laurence Campeggio, bishop of Salisbury (1525), whose seal is the latest to use this style, with the exception of the seal *ad causas* of John Taylor, bishop of Lincoln (1552), which has no *a* in its inscription.

Legends in capital letters return with the seal of Peter Courtenay, bishop of Winchester (1487), but there is no *A* in it, the first being on that of Fox, bishop of Durham (1494). There the letter approximates to the Roman capital, but otherwise the Lombardic form predominates.

B

There is little to be said about this letter, which is not one that admits of much variety. The earliest is on the seal of Osbern, bishop of Exeter (1072), where it is of an almost Lombardic form, with bifurcated terminations to the upright. It is not found again until Theobald, archbishop of Canterbury (1139), where it is of very ordinary form, and it continues so throughout, except that in the seal of Margaret, second wife of Edward I (1299), it approximates, possibly by an error, to an *R*. The black letter form is first found on the Bretigny seal of Edward III (1360), and thereafter it shows little change. The capital letter reappears on the seal of the Merchant Taylors' Company (1502) and is but little different from the earlier form, and so it continues.

C

This letter has often been used as a test of date, but without any very real ground. The earliest form, on the second seal of William I (1070), is almost square, and this type is also found on the seal of Flambard, bishop of Durham (1099), although there the corners are somewhat rounded, and between thirty and forty years later on those of Geoffrey Rufus, bishop of Durham (1133), and Theobald, archbishop of Canterbury (1139). It also occurs, with two other types, on the seal of St. Austin's Abbey, Canterbury (1199), but this is its last appearance. The more usual form is a rounded letter with ceriph at

the top and bottom, which gradually get longer and larger until they meet, thus forming the closed C. But although this seems to be the evolution, the closed C is found as early as Gundulf, bishop of Rochester (1077), and the 1106 seal of Henry I. It does not, however, appear again until Richard, archbishop of Canterbury (1174), and it then runs concurrently with the open form, the latter first being predominant, but later giving place entirely to the closed form, the last appearances of the open letter being on the seals of John Halton, bishop of Carlisle (1292), and Anthony Bek, bishop of Norwich (1337).

The black letter form is first found on the seal of Hatfield, bishop of Durham (1345). Its shape is almost invariable, the only differences being in the size of the top stroke. It last appears on the seal *ad causas* of Taylor, bishop of Lincoln (1552). The capital, except spasmodically as an initial letter, returns with Courtenay, bishop of Winchester (1487). This is not a Roman letter, but a pure Lombardic one, and in fact, during the period under review, the capital C generally has more of the Lombardic than the Roman style about it.

D

The earliest type of this letter, on the second seal of William I (1070), is purely Roman, but with Gundulf, bishop of Rochester (1077), William II (1087), and Anselm, archbishop of Canterbury (1093), it begins to take a Lombardic form, the up-stroke expanding at top and bottom. It reverts to the simple Roman shape in the seal of Flambard, bishop of Durham (1099),¹ and then continues approximating more and more to the Lombardic form, with what may be termed local variations due probably to the eccentricities of the engraver. A peculiar form of the letter is, however, occasionally found. This is somewhat like a reversed G. It appears on the counterseal of Richard, archbishop of Canterbury (1174), on the seal of Nicholas of Meaux, bishop of Man (1203), and on the counterseal of John Climping, bishop of Chichester (1254), but these are the only datable examples I have found, although it also appears on the seal of the town of Haverfordwest, which probably dates from the incorporation of the borough by Edward I in 1291. This form, therefore, has a range of a little over 100 years at least, and it reappears in 1526 on a seal which has been called that of the Crutched Friars of London, but is more probably that of some fraternity.

The black-letter form is first found on Hatfield's seal (1345), and it shows little variation except for an occasional bifurcation of the upper stroke, and for a still more rare rounding of the corners, as in the seal of Henry of Walton, archdeacon of Richmond (1348), where it is almost a counterpart of the second type of capital just referred to. Its last appearance is on the seal *ad causas* of John Taylor, bishop of Lincoln (1552).

When, apart from its continued use as an initial, the capital letter was revived (the first capital D is on the seal of Fox, bishop of Durham, 1494), there is little difference in form between it and the earlier Lombardic capitals. The simple Roman capital, however, becomes more usual towards the end of the period.

¹ Inadvertently omitted from the illustrations.

E

The earliest form is the square or Roman E found on the first seal of William the Conqueror (1066), but on his second seal (1070) both the square and the round, or Lombardic, forms are found. Osbern of Exeter (1072) uses the square form; William II (1087) uses both; Anselm, archbishop of Canterbury (1093), uses the square, while six years later Flambard of Durham has both. The square form is found on the second, third, and fourth seals of Henry I (1101, 1106, and 1107) and both on that of William Warelwast, bishop of Exeter (1107). In fact the square and round forms are used indifferently, but with a preponderance of round, down to Hugh Foliot, bishop of Hereford (1219), on whose seal the square E appears for the last time until the revival of capital letters late in the fifteenth century, Fox, bishop of Durham (1494), being the first to use it again.

The chief point of interest in the Lombardic E is whether it is closed or open. Like C, this closing is really only an extension of the ceriphs, and it is clear that it is not a criterion of date, at least to the extent generally supposed. The first closed forms of the letter are on the seals of William II (1087) and William Warelwast (1107), both of whom, as already noticed, use the square form as well, while Warelwast, in addition, has the open. The closed form is not found again until Toclive, bishop of Winchester (1173), and after that it steadily predominates over the open, the last instance of which is in 1262 on the seal of John Gervaise, bishop of Winchester. The closed form then continues by itself both in legends wholly in capitals and as an initial in black letter, and the open does not appear again until the seal of the Merchant Taylors' Company in 1502. After that date the square or Roman form becomes invariable.

There is little to be said about the black-letter form. The shape is practically the same throughout from its first use by Hatfield in 1345.

F

Little need be said about this letter. It is not one that lends itself to much variation and also it is a letter that was little used. The simple Roman form is first found, and this is gradually elaborated by thickening and expanding the main stroke and by enlarging the ceriphs. These are joined by Giles de Braose, bishop of Hereford (1200), and after Boniface, archbishop of Canterbury (1245) the form gradually becomes common. In black letter the form is always the same, but the double f, used as a capital, is found on the Fountains Abbey seal of 1410. Henry VII has an elaborate form on his first Great Seal (1485), but in essentials it does not differ from the earlier examples. The Lombardic reappears on the seal of the Merchant Taylors' Company (1502), and this and the Roman, found on Henry VIII's second seal (1532), alternate to the end of our period.

G

The earliest form of this letter, on the first seal of William the Conqueror (1066), is square. Thereafter, except on the fourth seal of Henry I (1107) and the seal of Richard

de Beames I, bishop of London (1108), it is more or less rounded, and the chief points for notice are the way in which the upper arm is drawn and the form of the lower arm. The upper arm tends to broaden towards its extremity and to get longer, frequently overlapping the lower part of the letter to a considerable extent. It also frequently develops an elaborate ceriph. The lower part of the letter generally terminates in a curl, large or small according to the taste of the artist. The modern shape of this part of the letter is first found on the counterseal of Eustace, bishop of Ely (1198), but this seems an aberrant form, as it does not appear again until the end of the fifteenth century with the seal of Silvester Gigliis, bishop of Worcester (1498). The black-letter form, which first appears on Hatfield's seal (1345), does not vary much, the main differences being in the tail, which is sometimes almost non-existent. The latest black-letter g is on the seal of Campeggio, bishop of Salisbury, 1525. When the use of capitals returns, Peter Courtenay, bishop of Winchester (1487), reverts to the Lombardic form, but this is soon abandoned for the Roman, although John Salcote, bishop of Bangor (1534), uses the Lombardic capital as well as the Roman.

H

The first example of this letter is on the second seal of William the Conqueror (1070), where two forms are used: the ordinary Roman capital and the Lombardic, consisting of a single upright with a curved right-hand arm. Henry I, on three of his seals (1101, 1106, 1107), uses an ordinary Roman capital except that the uprights are beginning to expand. The cross-bar in these, however, has an upright loop in the middle, resembling a sixteenth-century contraction mark. The Roman capital continues as the only form until 1154, when Roger de Pont l'Evêque, archbishop of York, uses the Lombardic, and this continues to predominate, the only reversions to the Roman being on the seals of Hugh Nonant, bishop of Coventry and Lichfield (1188), Geoffrey, archbishop of York (1191), Giles de Braose, bishop of Hereford (1200), Walter Gray, archbishop of York (1217), and Henry III's first Great Seal (1218), in which the right-hand upright is shorter than the left. The changes in the Lombardic capital are all in the nature of elaboration, either in the ceriphs, in the curl of the right-hand stroke, or in the bifurcation of the top or bottom of the upright. Richard I, in his first Great Seal (1189), has the letter reversed, probably an error on the part of the engraver.

The black-letter form is first found in Hatfield's seal (1345) and differs but little from the Lombardic capital. Within a few years, however, with Islip, archbishop of Canterbury (1349), it becomes more angular and thereafter continues without much change, such changes as there are being in the evolution of the tail, which sometimes is elaborate (Chicheley, archbishop of Canterbury, 1414) and sometimes tends to disappear altogether (John Holand, 1436). When capitals displace black letter, the letter takes the Roman form, all with the simple cross-bar except the Merchant Taylors' Company (1502), where the bar is looped as in Henry I's seals mentioned above.

I

The letter I gives little opportunity for variation. It is always an upright stroke with or without ceriphs, which are sometimes very elaborate. The letter also frequently expands at top and bottom, giving it somewhat the shape of an hour-glass. The first black-letter form occurs on the seal of Hatfield, bishop of Durham (1345), and the last on the seal *ad causas* of John Taylor, bishop of Lincoln (1552). A tailed i, or j, is found in black letter on the seal *ad causas* of John Stafford, archbishop of Canterbury (1443), and a capital J on those of John Morton, bishop of Ely (1479), and John Coke, archdeacon of Lincoln (1481).

K

This is a letter of which little use appears to have been made in the middle ages, at least to judge from seals. The first example found is on the seal of Silvester Everdon, bishop of Carlisle (1247). There it is much the same as an R except that the loop does not join on to the top of the upright stroke but springs a little below. Other examples are of this form, viz. John Halton, bishop of Carlisle (1292), and the Hull Statute Merchant seal of 1331. It is also found on the seal of Haltemprice Priory (1322), but here it is almost identical with R. The black-letter form first appears on the seal of William of Wykeham, bishop of Winchester (1367), and again on that of John Coke, archdeacon of Lincoln (1481), but these are the only datable examples found so far. On the replacement of black letter by capitals, the capital letter is used by John Kite, bishop of Carlisle (1522), where it is much the same as an R although quite different from the R on the same seal, and by William Burbanke, archdeacon of Carlisle (1524). Here for the first time it has the open top, approximating to the modern form of the letter.

L

This is another letter whose form has changed but little, the only variations being in the elaboration of the ceriphs, the expanding of the main stroke, and the increasing height of the arm of the cross-stroke, which sometimes terminates in a curl. The letter is found as early as the first seal of William the Conqueror (1066) and it is hardly necessary to cite examples, beyond drawing attention to the seal of Winchester Cathedral Priory (1294), where the bottom of the main stroke is bifurcated, and to that of Queen Margaret (1299), where the arm is floriated.

The black-letter form, which is first found on Hatfield's seal (1345), consists of a single upright stroke, generally bifurcated at the top and with the bottom sometimes lozenge shaped, but more often prolonged on the right-hand side. The last instance of the black-letter form is on the seal *ad causas* of John Taylor, bishop of Lincoln (1552).

With the introduction of capitals—the first instance is on the seal of Peter Courtenay, bishop of Winchester (1487)—the form reverts to the Lombardic, but it gradually assumes more of the Roman shape.

M

There are three varieties of this letter in common use as a capital, and it will perhaps, therefore, be convenient to treat them separately. The first is the ordinary Roman form. The earliest example, on the first seal of William the Conqueror (1066), is quite simple without any ceriphs, but the letter tends to become bolder and to develop ceriphs very early. They are rudimentary on William's second seal (1070) and pronounced in those of Gundulf, bishop of Rochester (1077), and Anselm, archbishop of Canterbury (1093), where the strokes have also become much broader. Flambard, bishop of Durham (1099), reverts to narrow strokes, and in this seal the uprights are set at an angle, a practice which occurs sporadically throughout. From this date the narrow and broad form of the letter are found concurrently, sometimes with small, sometimes with pronounced ceriphs, and in one instance, the counter of Richard, archbishop of Canterbury (1174), with almost none at all. Attention may also be drawn to the way in which the cross-bars are in some instances made very subordinate and sometimes spring, not from the top of the uprights, but from some little way down their sides. This first type of the letter continues in use down to 1344 on the seals of William Bateman, bishop of Norwich, and Thomas Beauchamp, earl of Warwick, and reappears again, on the resumption of capital letters, on Fox's seal as bishop of Durham (1494) and thereafter continues in use alone.

The second type of the letter may be described as an O with a curved stroke on the right-hand side. It is first found on the seal of Eustace, bishop of Ely (1198), and, together with the first type and another to be described shortly, on the second Great Seal of Richard I of the same date. It also occurs on the counterseal of Stephen Langton, archbishop of Canterbury (1207), but after that is not found until the third seal of Canterbury Cathedral Priory (1233), where it is much modified. A similar form is on the counterseal of Edmund Rich, archbishop of Canterbury (1234), and on the seals of Merton Priory (1241), Norwich Cathedral Priory (1258), and Henry III (1263). John Peckham, archbishop of Canterbury (1279), reverts to the pure O form on both his seal and counter, as do David Martyn, bishop of St. Davids (1296) and Simon Meopham, archbishop of Canterbury (1328), while a much modified form is on Edward III's 1338 seal. A variant of this second type with both sides closed is to be seen on the seals of William Vere, bishop of Hereford (1186), Richard I (1198), Richard of Wendover, bishop of Rochester (1238), Michael of Northburgh, bishop of London (1354), and the North Stowe Labourers' Passes seal of 1388.

The third type of the capital appears to be a direct development from the preceding, as it is made by opening the bottom part of the letter. The earliest example is on the seal of Philip of Poitou, bishop of Durham (1197), where the two arms end in curves, the usual form. After that it is not found until the seal of Leeds Priory, Kent (1293). It also occurs on the Dover Corporation seal (1305), where the ends curve upwards, and in a simpler shape on that of William Melton, archbishop of York (1317). Richard of Bury, bishop of Durham, on his first seal (1333), shortens the arms in a peculiar manner, so that the letter looks almost like a T with a rounded top. This third type continues until Simon Langham, bishop of Ely (1362), which is its last occurrence.

158 THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS

There is little to say about the black-letter form. It is first found on Hatfield's seal (1345) and invariably consists of three minims, generally, but not always, joined at the top and bottom. In one instance, Shrewsbury town (1425), the right-hand stroke is brought down below the line, but that is the only important variant to be noted. The last seal on which the black-letter form is found is that of William Atwater, bishop of Lincoln (1514).

N

The Roman form of the capital letter is first found on the first seal of William the Conqueror (1066), where it has no ceriphs and is broader than it is high. The stroke starts at the top of the left-hand upright and ends at the very bottom of the right-hand one. Ceriphs first appear on his second seal (1070). In that of Osbern, bishop of Exeter (1072), the cross-bar terminates about a third above the bottom of the right upright, a practice which becomes common although by no means universal. In some instances it starts about a third below the top of the left upright as well, as in William II's seal (1087), while in that of Theobald, archbishop of Canterbury (1139), this tendency becomes so exaggerated as to make the letter look almost like an H. Occasionally the crossing is reversed, as on the seal of Flambard, bishop of Durham (1099). Beyond these variations the letter develops in the usual way with the uprights becoming broader and spreading at the ends, although the thin form of the letter continues *pari passu*.

The Lombardic capital, made by an upright with a curve added on the right, first occurs on the seal of Philip of Poitou, bishop of Durham (1197), and six years later on that of Nicholas of Meaux, bishop of Man. It is not again found until the third Canterbury seal of 1233. Rich uses it on his counter in 1234, as also do Wendover, bishop of Rochester (1238), Fulk Bassett, bishop of London (1244), Roger of Weseham, bishop of Coventry and Lichfield (1245) and Walter Kirkham, bishop of Durham (1249). After that date it is more generally used than the Roman and continues as an initial when the black-letter style has become established. The letter also reappears in this form on the reintroduction of capitals, Courtenay, bishop of Winchester, using it in 1487. But this is its last occurrence, the Roman capital displacing it with Silvester Gigliis, bishop of Worcester (1498), and continuing in use thenceforward.

The black-letter form, which consists of two minims sometimes open at the top and bottom but more often closed, is first found in 1345 on Hatfield's seal, and shows little or no variation until its final disappearance with John Taylor, bishop of Lincoln (1552).

O

On William I's two seals (1066-70) this letter is shaped like a lozenge, but on the second the round form also appears. This, at first, is generally narrow and of the same width all round, but even in William's second seal (1070) it shows a tendency to widen at each side, and this tendency steadily develops. The letter generally is rather oval than round, but a complete circle is found on the seal of Hugh Puiset, bishop of Durham (1153). Occasionally, too, the letter is pointed at the top and bottom, as on

the seals of Henry II (1154), Walter Gray, archbishop of York (1217), and William Middleton, bishop of Norwich (1278). Sometimes, especially later, the widening of the sides makes the space enclosed almost rectangular, as for example the seals of Aymer de Valence, bishop elect of Winchester (1250), and Hugh Balsham, bishop of Ely (1257), while sometimes, as on the seal of Leeds Priory (1293), the enclosed space almost entirely disappears. Another, later, characteristic is to make the sides pointed, as with Walter Reynolds, archbishop of Canterbury (1313), and Canterbury city (1318). The capital reappears with Peter Courtenay, bishop of Winchester (1487), where the left-hand side is almost cusped. With the Merchant Taylors' Company (1502) this cusping is extended to the right side, and on the so-called Crutched Friars' seal of 1526 the cuspings meet, giving the enclosed space a figure-of-eight form. Otherwise, the letter remains normal, except that John Kite, bishop of Carlisle (1522), and to a less extent Nicholas Heath, bishop of Worcester (1543), thicken what may be called the NE. and SW. sides.

Of the black-letter form there is little to be said. It is first found on Hatfield's seal of 1345, and continues with almost no variation until its disappearance, the last occurrence being on the seal *ad causas* of John Taylor, bishop of Lincoln (1552).

P

This is another letter which admits of little variation, such variations as there are being all in the direction of a thickening or elaboration of the upstroke and loop. The earliest, on William I's first seal (1066), is a very simple form, but with Osbern (1072) the upright begins to thicken and to expand at the ends. On Anselm's seal (1093) the top of the loop is higher than the top of the upright, and with Flambard (1099) there are distinct ceriphs. The simplest form is reverted to on Richard, archbishop of Canterbury's counter (1174), and a very narrow and elongated form is found on the seal of Walter Gray, archbishop of York (1217), but otherwise there is little variation to be noted. Occasionally the base is bifurcated, as on the seals of Langton, archbishop of Canterbury (1207), and Silvester Everdon, bishop of Carlisle (1247), and sometimes the right-hand bottom ceriph is lengthened out as far as the end of the loop, as on that of Kellawe, bishop of Durham (1311). There are bifurcations at both top and bottom, with the bottom of the loop nearly reaching to the base, on the seal of Simon Langham, bishop of Ely (1362). The form is revived by Courtenay in 1487 and continues much the same thereafter.

The black-letter form first appears on Hatfield's seal (1345) and shows little change throughout, the main variations being in the length of the tail and in the extension of the bottom stroke of the loop to the left of the upright. The black letter form is last found on the seal *ad causas* of Taylor, bishop of Lincoln (1552).

Q

This letter occurs but rarely and follows the evolution of the O with variations in the tail. The earliest example found is on the first Great Seal of Henry II (1154), where it is represented as an O with a slightly rising tail. Sometimes the tail is short

160 THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS

and pointed as on Richard I's first seal (1189), and sometimes short and curled as on his second seal (1198). More elaborate forms of the tail are to be seen on the seals of Canterbury city (1318) and Haltemprice Priory (1322), while a very truncated form is on Edward III's seal of 1338.

The black-letter form is made by an O with a prolongation of the right-hand stroke below the line. The only examples found are on Edward III's Bretigny seal (1360) and on that of John Holand as admiral of England (1436).

R

The capital of this letter is fairly constant in form throughout, and, as usual, the variations are in the nature of a broadening and expansion of the upright and an elaboration of the tail. On William I's seals (1066, 1070) the letter is of a very simple form, but with Anselm (1093) it becomes more elaborate with a distinctly ornamental tail. A peculiar form is found on the seal of Theobald, archbishop of Canterbury (1139), and one which is practically a K on the counter of Archbishop Richard (1174). The bottom of the upstroke is bifurcated by Longchamp of Ely (1189), and on the seal of St. Austin's, Canterbury (1199), the top is bifurcated in one example and the tail elaborately curled in the other. An unusual form is on the seal of Walter Gray, archbishop of York (1217); here the tail springs from the loop with a short vertical bar parallel with the upright and then branches off at an angle. The tail on Bishop Hugh Balsham's seal (1257) is cut off vertically and this is not uncommon afterwards, but is probably due as a rule to exigencies of space. The tail of the letter on the seal of Dover (1305) is cut off at an angle. The capital is found as an initial right through the period of black letter and is used as such in a pure Lombardic form by Henry VII on his Great Seal (1485). Peter Courtenay has an equally pure Lombardic form in 1487, when the use of capitals comes in again, and this form with occasional reversions to the Roman, as in that of Fox, bishop of Durham (1494), continues thenceforward.

The black-letter form, of which the earliest example is on Hatfield's seal (1345), shows two styles. The more usual is a minim with a tail coming out at the top on the right. This tail is generally lozenge-shaped, but a variety is seen on the secret of Edyngton, bishop of Winchester (1346). The other form is the short r first found on the seals of Nevill, archbishop of York (1374), and Ralph Ergham, bishop of Salisbury (1375). Two forms of the short r are to be seen on Henry VII's Great Seal (1485), one hardly distinguishable from an i and the other similar to Nevill's. The last example of the black-letter form is on the seal of Campeggio, bishop of Salisbury (1525).

S

The earliest form of this letter is like a reversed Z and is found on the two seals of William the Conqueror (1066, 1070). It is also found on the seal of Ralph, archbishop of Canterbury (1114). On his second seal (1070) William also uses a form like an Arabic 2 reversed or a reversed Z with the top arm curved. Osbern, however, in 1072, uses the ordinary Roman form and thereafter this form subsists, becoming more and more Lombardic by enlarging the ceriphs and widening the centre, although a very

thin form is also found in use alongside of it for a good many years, as in the seal of Seffrid of Chichester (1125), Stephen's second seal (1143), Richard of Canterbury's counter (1174), and Longchamp of Ely's counter (1189). Occasionally, presumably in error, the letter is reversed, as by Henry of Blois, bishop of Winchester (1129), and Fox, bishop of Durham (1494). It appears in a very degenerate form in the North Stowe Labourers' Passes seal of 1388 and is used regularly as an initial in black-letter legends.

The ordinary black-letter form varies very little, chiefly in an elaboration of the crossing stroke. The long *s*, which is like an elongated *c*, first appears on the secret of Edyngton, bishop of Winchester (1346), and is found regularly wherever the needs of the engraver required it. The last example of the black letter, and then in its long form, is on the seal *ad causas* of Taylor, bishop of Lincoln (1552).

On the revival of capitals Peter Courtenay (1487) uses a rather attenuated Lombardic form, but although this form continues there is a marked tendency to revert to the Roman type by the end of the period under review.

T

On the first seal of William I (1066) this letter is of the ordinary Roman form with ceriphs at the end of each arm. It is not found again until William of Corbeille, archbishop of Canterbury (1123), where it has become much thicker, with the stem widened and bifurcated at the bottom. Stephen, on his second seal (1143), Hugh Puiset (1153), Henry II, on his first seal (1154), and Bartholomew, bishop of Exeter (1161), use thin forms more like those of William I, but Theobald of Canterbury (1139) and Hilary of Chichester (1148) have a broader and more spreading form. From the time of Toelive of Winchester (1173) this becomes the regular type of this form of letter, with variations in the size of the ceriphs and of the cross-bar, that on Rich's seal (1234) being almost reduced to a single stroke with short ceriphs.

The rounded form of the letter, what may be called the true Lombardic form, is first found in the counterseal of Richard, archbishop of Canterbury (1174), and it next appears on the seal of St. Austin's, Canterbury (1199), where there is a short neck between the cross-bar and the curve. It is also found, among others, on the Norwich seal of 1258, on that of Edward I (1272), on the second and third of Edward III (1327, 1340), on the counter of Simon Langham, bishop of Ely (1362), and in a debased form on the North Stowe Labourers' Passes seal of 1388. It will thus be seen that this form of the letter has a currency of just over 200 years, but it is never common, and the other form is far more usual. It also occurs as an initial in the black-letter inscription on the counter of Simon Islip, archbishop of Canterbury (1349), and is revived by Peter Courtenay in 1487, but after that the Roman type is invariable.

The black-letter form is first found on Hatfield's seal of 1345. It varies but little and then mainly in the length of the upright above the crossing and in the shape of the top, which is either straight, pointed, or bifurcated. Occasionally, as in the seals of Shrewsbury (1425) and Morton of Ely (1479), the cross-bar is thin and has a tail attached to its front. It is last found on Wareham's seal of 1503.

V

The earliest form, on William I's seal of 1066, is an ordinary Roman V slightly spreading towards the top of the strokes. Henceforward this form remains constant, with the usual variations of a thickening of the strokes and an enlargement of the ceriphs. The strokes usually taper towards the base, but occasionally, as with Anselm (1093), they are of the same width throughout. The tops are sometimes cut off at an angle—for example, by Peter des Roches, bishop of Winchester (1205)—or are bifurcated, as by Jocelin, bishop of Bath and Wells (1206), but generally there is little variation. A peculiar form is to be seen on the seal of Leeds Priory, Kent (1293). With the revival of capitals, Peter Courtenay (1487) uses a form with bifurcated ends, as does Fox as bishop of Winchester (1501), but afterwards the type is purely Roman. Attention may be drawn to the form used by Rugge of Norwich (1536), which has a kind of foot.

The U form first occurs in the seal of Philip of Poitou, bishop of Durham (1197) where it is reversed, and on that of Eustace, bishop of Ely (1198), and on both the V is found as well. It also occurs ligatured with M on the seal of St. Austin's, Canterbury (1199). It is next found, together with the V form, on the third Canterbury seal (1233) and on the counter of Edmund Rich, archbishop of Canterbury (1234), the V form being on his seal of dignity. It is found on the counter of Richard of Wendover, bishop of Rochester (1238), on the seal of Richard of Wyche, bishop of Chichester (1245), and reversed on those of Merton Priory (1241) and Walter Kirkham of Durham (1249). It also occurs, together with the V, on the seal of Norwich Cathedral Priory (1258), reversed on the second seal of Henry III (1259) and on that of Kilwardby, archbishop of Canterbury (1273), and without the V on those of Robert Burnell of Bath and Wells (1275), John Peckham of Canterbury (1279), and (reversed) Walter Reynolds of Worcester (1308), but that is its last occurrence, as it is not used with the revival of capitals until well after the end of our period, when it assumes the modern shape. This form, therefore, has a range of just over a century, from 1197 to 1308, but it is used but sparingly and the V is far the more common.

The black-letter form first occurs on Hatfield's seal of 1345, where it consists of two minims and is almost indistinguishable from n. This remains the constant form, but a true v is found on the seals of Shrewsbury (1425), Edward IV (1462), and John Morton of Ely (1479). The black-letter form is last found on the seal *ad causas* of Atwater, bishop of Lincoln (1514).

W

The origin of this letter is well seen in the first example, William I's second seal (1070), where it is represented by two V's side by side. The evolution of each V follows that of the single letter, so need not detain us; but the evolution of the double letter requires consideration. The practice was to superimpose one V upon the other, as is seen in William II's seal (1087) and thereafter the main point for notice is the manner in which the two inner strokes tend to unify above the crossing. This amalgamation is not found for nearly 200 years, unless Toclive of Winchester's seal (1173) is an example;

but the impression is much worn and it is difficult to be certain. It is, however, clearly evident on the seals of Walter de la Wyle of Salisbury (1263), Giffard of York (1266), William Bitton II of Bath and Wells (1267), his successor, Robert Burnell (1275) and Middleton of Norwich (1278). In all these examples the upper part of the left upright of the right V has disappeared. A few years later the union of the upper parts of the middle strokes is complete and symmetrical as in the following: Gloucester Statute Merchant (1283), Louth, archdeacon of Durham (1284), Corner of Salisbury (1288), Redeswelle, archdeacon of Chester (1290), Louth of Ely (1290), Merewell of Winchester (1305), Reynolds of Worcester (1308), and Hull Statute Merchant (1331).

A very modern and pure Roman form is found on the seal of Greenfield of York (1304), where the inner top strokes end in a point; but this appears to be the only instance.

With the reintroduction of capitals, Courtenay (1487) uses a letter with the unified middle strokes, like the Gloucester Statute Merchant group mentioned above, but afterwards the superimposed form is predominant, except that, strangely enough, Clarke of Bath and Wells (1523) and Rugge of Norwich (1536) revert to the most primitive type of all, the two V's side by side.

The black-letter form consists of two minims, often set at an angle with the base line, with a third stroke on the right something like the short r, although occasionally another and shorter minim takes its place, as in Courtenay of Canterbury (1381) and Skirlaw of Durham (1388). Beyond this the letter shows practically no variation. The black-letter form first occurs on Hatfield's seal of 1345 and its last appearance is on the seal *ad causas* of Atwater, bishop of Lincoln (1514).

X

This letter is first found on the seal of William II (1087) where it is an ordinary saltire with short ceriphs, one stroke being clearly shown as superimposed on the other, although this does not show in the drawing. William Warelwast, bishop of Exeter (1107) has an equiangular saltire with the strokes conjoined at the centre, not superimposed, while in Stephen's first seal (1135) one stroke is considerably thinner than the other. On his second seal (1143) the strokes are of the same width superimposed, but the upper and lower angles are much more obtuse than the side ones, making the letter broader than it is high, and the same peculiarity is seen on Henry II's first seal (1154). After this the letter follows one or other of these patterns until John (1199), where one of the strokes is curved, and this curving afterwards on the whole becomes the predominant form, although that with two straight strokes is still found, as on Edward I (1272), Exeter Statute Merchant (1292), and the counter of Stratford of Canterbury (1333).

Black letter is first found on Edward III's Bretigny seal (1360), where the letter consists of a minim with a diagonal cross-stroke. Other forms are found on Henry IV's Great Seal (1399) and Edward IV's first seal (1461), where the letter is practically an r with a horizontal cross-stroke, and on that of Shrewsbury (1425), where both the diagonal and horizontal cross-strokes appear together.

Y

This letter is rarely found, the first example being on the seal of Ipswich (1200), where it resembles a claw-hammer, and this form continues, with modifications, throughout. Hugh of Northwold, bishop of Ely (1229), curls the top of the left-hand stroke; William of Louth, bishop of Ely (1290), makes the letter much more square, Queen Margaret (1299) bifurcates the right-hand stroke, William Aymain, bishop of Norwich (1325), curls the tail upwards, and Anthony Bek, bishop of Norwich (1337), curls it downwards. In not a single instance does the letter take the modern form of an upright with a fork on the top, not even after the revival of capitals, the only example of the use of the capital letter in the early sixteenth century being on Wolsey's seal as bishop of Winchester (1528). There, as in the earlier examples, the tail is a downward extension of the right-hand arm of the fork. A grotesque form of the letter is found on the North Stowe Labourers' Passes seal of 1388, which has two tails crossed.

In essentials with slight variations the black-letter form is the capital on a smaller scale. There are but few examples. The first is on Edyngton, bishop of Winchester's seal (1346), and the last datable one on Gray, bishop of Ely's seal of 1454.

Z

The only example found at present which can be dated is on the seal of Haltemprice Priory (1322). Here the letter is exactly like a Roman Z but without any ceriph and with the lower stroke slightly curved. This Haltemprice seal, peculiar in many ways, is peculiar also in this: that its legend contains every letter of the alphabet.

The ampersand is occasionally represented by a Z, as on Henry VIII's golden bulla (1527).

LIGATURES

Ligatures are not as common as might be expected, considering the restricted space allowed for the legends. The most common are DE, OR, and AN. The earliest DE is on the St. Austin's seal of 1199, which also has OR and UM, and the latest on Archbishop Wareham's (1503). The earliest ligatures of all are AN and ARD on the counter of Richard of Canterbury (1174). OR in some instances, both Lombardic and black letter, is scarcely to be distinguished from M. Ligatures of CA, ET, and TI are found on Cardinal Pole's seal of 1556, and TR on Weseham of Lichfield's seal (1245), which also ligatures ER.

The result of this inquiry shows that the styles of lettering cannot be so differentiated as to form a safe basis for deductions as to date. Indeed, it shows conclusively that no such clear-cut divisions can be substantiated. The nearest approach to such a division is in the adoption of the black letter, which is first found in 1345 on the seal of Hatfield, bishop of Durham. But even in

this there is a very considerable overlap both at the beginning and the end, capitals still being used alone down to 1388 and the black letter continuing well into the sixteenth century, long after the use of capitals had been revived. What too seems as certainly to be disproved is that any division can properly be made between the two styles of capital letter. It is impossible to assert that Roman capitals were the first used when William I in 1070 uses a Lombardic A, E, and H, and when Osbern, bishop of Exeter, two years later, has a perfectly good Lombardic B and G. Nor is it possible to consider that a kind of rude Lombardic came in with Richard, archbishop of Canterbury, in 1174. Most of the letters on his seal are of good Lombardic form, and some, especially his counterseal, can be matched earlier. The change, in fact, was a continuous process, and the evidence tends to show that, although the Lombardic developed from the Roman, the development was slow and gradual, beginning almost at once and the style not reaching perfection until well into the thirteenth century. Neither can it be asserted that Lombardic capitals disappeared about 1350, when they are used alone in 1376 by Swaffham, bishop of Bangor, and in 1388 on the North Stowe seal, and continue to be used as initials in black-letter inscriptions. It also cannot be correct to say that it was the Roman capital which was revived about 1500, when Courtenay, bishop of Winchester, uses Lombardic capitals alone in 1487 and when most of the capital letters retained a Lombardic form until long after the beginning of the sixteenth century.

Lastly, it may be of interest to emphasize the extraordinary diversity of the letters, for no two are identical. This goes to prove that the medieval engraver did not use stamps or puncheons for his letters. In fact, the first English seals where their use seems to be certain are the Ecclesiastical Causes seals of 1 Edward VI, where not only the letters but also the charges and accessories of the shield appear to have been produced in this way.

1066 A	1174 A A	1217 A	1247 A	1275 A	1305 A	1337 A	1374 A	1438 A	1517 A
1070 A	1183 A	1218 A A	1249 A	1275 A	1305 A	1338 A	1375 A	1443 A	1528 A
1087 A	1186 A	1219 A	1250 A	1275 A	1308 A	1340 A	1376 A	1443 A	1531 A
1099 A	1189 A	1221 A	1251 A	1279 A A	1313 A	1340 A	1381 A	1444 A	1532 A
1106 A	1189 A	1221 A	1252 A	1282 A	1315 A	1340 A	1381 A	1447 A	1534 A
1107 A	1189 A	1224 A	1254 A	1283 A	1317 A	1340 A	1382 A	1452 A	1534 A
1114 A	1189 A	1226 A	1254 A	1283 A	1317 A	1341 A	1388 A	1454 A	1539 A A
1123 A A	1191 A	1228 A A	1257 A	1284 A	1318 A A	1342 A	1388 A	1455 A	1543 A
1123 A	1192 A	1228 A	1258 A	1285 A	1318 A	1344 A	1388 A	1461 A	1546 A
1125 A	1193 A	1229 A A	1258 A	1288 A	1318 A	1344 A A	1391 A	1462 A A	1547 A
1135 A	1194 A	1229 A	1259 A	1290 A	1322 A	1345 A	1393 A	1479 A	1556 A
1139 A	1197 A	1230 A	1261 A	1290 A	1325 A	1348 A A	1396 A	1483 A	
1143 A	1198 A A	1233 A	1262 A	1292 A A	1327 A	1349 A	1397 A	1494 A	
1148 A	1198 A	1234 A	1263 A A	1292 A	1328 A	1352 A	1399 A A A	1501 A	
1149 A	1198 A	1234 A	1263 A	1293 A	1328 A	1353 A	1407 A	1502 A	
1153 A	1199 A	1237 A	1263 A	1294 A	1330 A	1354 A	1407 A	1502 A	
1154 A	1199 A	1238 A	1266 A	1296 A	1330 A	1360 A A	1407 A	1503 A	
1154 A	1203 A	1240 A	1267 A	1297 A	1331 A	1362 A	1410 A	1514 A	
1161 A	1203 A	1241 A	1268 A	1299 A	1333 A	1366 A	1414 A	1522 A	
1161 A	1205 A	1244 A	1269 A	1300 A	1333 A	1367 A	1425 A	1523 A A	
1164 A	1206 A A	1245 A	1272 A	1302 A	1333 A A	1368 A	1426 A	1524 A	
1173 A	1207 A A	1245 A	1273 A A	1304 A	1336 A	1370 A	1426 A	1525 A	
1174 A A	1217 A	1245 A	1274 A	1305 A	1337 A	1374 A	1436 A	1526 A	

1072 B	1263 B	1353 B	1524 B
1139 B	1265 B	1356 B	1525 B
1148 A B	1266 B	1358 B	1527 B
1154 B	1267 B	1360 B	1530 B
1161 B	1272 B	1360 B	1532 B
1189 B	1274 B	1361 B	1534 B
1191 B	1275 B	1362 B	1546 B
1194 A B	1279 B	1360 B	1547 B
1199 A B	1283 B	1369 B	1547 B
1205 B	1285 B	1374 B	
1206 B	1290 B	1376 B	
1207 B	1292 B	1388 B	
1217 B	1297 B	1399 B	
1217 B	1299 B	1407 B	
1218 B	1304 B	1410 B	
1219 A B	1305 B	1425 B	
1228 A B	1317 B	1436 B	
1233 B	1318 B	1438 B	
1244 B	1322 B	1444 B	
1258 B	1327 B	1461 B	
1258 C B	1330 B	1462 B	
1261 B	1331 B	1485 B	
1263 B	1335 B	1502 B	

1070	1164	1206	1249	1283	1322	1346	1407	1527
1077	1173	1207	1251	1283	1325	1349	1407	1530
1093	1174	1217	1252	1284	1327	1352	1410	1532
1099	1174	1217	1254	1285	1328	1353	1414	1534
1106	1183	1218	1254	1290	1328	1354	1425	1534
1107	1186	1219	1258	1292	1330	1360	1426	1536
1114	1186	1221	1258	1292	1330	1362	1436	1539
1123	1189	1224	1259	1293	1331	1366	1438	1543
1123	1189	1226	1261	1294	1333	1368	1443	1546
1123	1191	1228	1262	1296	1333	1370	1444	1547
1133	1193	1228	1265	1297	1335	1374	1454	1547
1139	1194	1229	1265	1299	1336	1375	1455	1552
1148	1197	1229	1266	1300	1337	1376	1461	1556
1148	1198	1230	1267	1304	1337	1381	1479	
1149	1198	1235	1272	1305	1338	1388	1481	
1151	1198	1234	1272	1305	1340	1388	1485	
1153	1199	1237	1273	1305	1340	1388	1487	
1153	1199	1238	1274	1311	1340	1391	1501	
1154	1200	1241	1275	1313	1341	1393	1502	
1154	1200	1244	1278	1317	1342	1396	1514	
1156	1203	1245	1279	1318	1344	1397	1522	
1161	1205	1245	1280	1318	1344	1399	1524	
1161	1205	1245	1282	1318	1345	1405	1526	

1070	1186	1217	1249	1278	1305	1340	1396	1502
1077	1186	1218	1250	1279	1311	1340	1397	1502
1087	1186	1219	1251	1279	1313	1340	1399	1514
1093	1189	1221	1252	1280	1315	1341	1403	1523
1107	1189	1224	1254	1282	1317	1344	1407	1524
1108	1189	1224	1254	1283	1318	1344	1407	1525
1114	1191	1226	1257	1285	1318	1345	1410	1526
1123	1192	1228	1258	1284	1318	1348	1414	1527
1123	1193	1229	1258	1284	1322	1354	1436	1530
1133	1194	1229	1261	1288	1323	1360	1436	1531
1135	1197	1230	1265	1290	1327	1362	1438	1532
1139	1198	1233	1265	1290	1328	1367	1438	1534
1143	1198	1234	1265	1292	1328	1368	1443	1539
1148	1198	1234	1265	1292	1330	1369	1443	1546
1148	1199	1237	1266	1294	1330	1370	1447	1547
1149	1199	1238	1267	1296	1331	1374	1455	1552
1153	1200	1240	1268	1297	1333	1374	1461	1556
1153	1203	1241	1269	1299	1335	1375	1462	
1164	1205	1244	1272	1300	1335	1381	1479	
1173	1205	1245	1274	1302	1336	1382	1481	
1174	1206	1245	1275	1304	1337	1388	1485	
1174	1207	1245	1275	1305	1338	1388	1494	
1183	1217	1247	1275	1305	1340	1391	1501	

1066	E	1149	E	1192	E	1244	E	1254	E	1315	E	1340	E	1375	E	1413	E	1530	E
1070	EE	1151	E	1193	E	1246	E	1256	E	1317	E	1340	E	1376	E	1413	E	1531	E
1072	E	1153	E	1194	E	1248	E	1257	E	1317	E	1341	E	1381	E	1444	E	1532	E
1077	E	1153	E	1194	E	1248	E	1258	E	1318	E	1342	E	1382	E	1447	E	1534	E
1087	EE	1154	E	1197	E	1249	E	1258	E	1318	E	1344	E	1388	E	1452	E	1534	E
1093	E	1154	E	1198	E	1249	E	1259	E	1318	E	1344	E	1388	E	1454	E	1536	E
1099	EE	1156	EE	1198	E	1250	E	1261	E	1320	E	1345	E	1388	E	1459	E	1539	E
1101	E	1161	E	1198	E	1253	E	1262	E	1325	E	1346	E	1391	E	1461	E	1546	E
1106	E	1161	E	1199	E	1254	E	1263	E	1327	E	1348	E	1393	E	1462	E	1547	E
1107	E	1164	EE	1199	E	1254	E	1263	E	1328	E	1349	E	1396	E	1479	E	1547	E
1107	EE	1173	E	1200	E	1257	E	1265	E	1328	E	1352	E	1397	E	1481	E	1556	E
1114	E	1174	E	1200	E	1258	E	1266	E	1329	E	1353	E	1399	E	1483	E		
1123	EE	1174	EE	1203	E	1260	E	1267	E	1329	E	1354	E	1405	E	1487	E		
1123	E	1183	E	1203	E	1261	E	1268	E	1331	E	1360	E	1407	E	1494	E		
1125	E	1186	E	1205	E	1264	E	1272	E	1333	E	1361	E	1407	E	1498	E		
1125	E	1186	E	1206	E	1265	E	1273	E	1333	E	1362	E	1407	E	1501	E		
1129	E	1186	E	1207	E	1265	E	1274	E	1333	E	1366	E	1410	E	1502	E		
1133	EE	1188	E	1217	E	1268	E	1275	E	1336	E	1367	E	1414	E	1502	E		
1135	E	1189	E	1217	E	1267	E	1275	E	1337	E	1368	E	1425	E	1522	E		
1139	EE	1189	E	1218	E	1269	E	1275	E	1337	E	1369	E	1426	E	1523	E		
1143	E	1189	E	1219	E	1269	E	1278	E	1338	E	1370	E	1426	E	1524	E		
1148	E	1189	E	1221	E	1251	E	1279	E	1341	E	1374	E	1436	E	1526	E		
1148	E	1191	E	1224	E	1252	EE	1280	E	1343	E	1374	E	1438	E	1527	E		

1070	F	1322	F	1066	G	1153	G	1196	G	1233	G	1265	G	1293	G	1330	G	1360	G	1426	G	1527	G
1099	F	1330	F	1072	G	1154	G	1198	G	1234	G	1266	G	1294	G	1331	G	1361	G	1436	G	1528	G
1106	F	1340	F	1077	G	1154	G	1198	G	1234	G	1267	G	1297	G	1333	G	1366	G	1438	G	1530	G
1191	F	1340	F	1087	G	1161	G	1199	G	1237	G	1268	G	1299	G	1333	G	1367	G	1443	G	1532	G
1198	F	1341	F	1093	G	1161	G	1199	G	1238	G	1272	G	1300	G	1333	G	1370	G	1444	G	1534	G
1199	F	1344	F	1099	G	1164	G	1200	G	1240	G	1273	G	1302	G	1336	G	1374	G	1447	G	1536	G
1200	F	1370	F	1106	G	1173	G	1203	G	1241	G	1274	G	1309	G	1337	G	1374	G	1452	G	1539	G
1207	F	1388	F	1107	G	1174	G	1203	G	1244	G	1275	G	1309	G	1337	G	1376	G	1454	G	1543	G
1238	F	1393	F	1107	G	1174	G	1205	G	1245	G	1275	G	1305	G	1337	G	1381	G	1455	G	1546	G
1244	F	1399	F	1108	G	1183	G	1206	G	1245	G	1275	G	1305	G	1338	G	1381	G	1461	G	1547	G
1245	F	1410	F	1123	G	1186	G	1207	G	1245	G	1278	G	1308	G	1340	G	1388	G	1462	G	1547	G
1251	F	1425	F	1123	G	1186	G	1217	G	1247	G	1279	G	1311	G	1340	G	1388	G	1479	G	1547	G
1252	F	1424	F	1125	G	1186	G	1218	G	1249	G	1280	G	1313	G	1340	G	1388	G	1481	G	1556	G
1258	F	1462	F	1125	G	1188	G	1219	G	1250	G	1282	G	1315	G	1340	G	1388	G	1485	G		
1268	F	1485	F	1129	G	1189	G	1221	G	1254	G	1283	G	1317	G	1341	G	1393	G	1487	G		
1269	F	1502	F	1133	G	1189	G	1224	G	1257	G	1283	G	1317	G	1342	G	1396	G	1494	G		
1275	F	1526	F	1135	G	1189	G	1224	G	1258	G	1284	G	1318	G	1344	G	1397	G	1498	G		
1283	F	1537	F	1139	G	1189	G	1226	G	1258	G	1285	G	1318	G	1344	G	1399	G	1501	G		
1294	F	1532	F	1143	G	1189	G	1228	G	1259	G	1288	G	1322	G	1345	G	1407	G	1502	G		
1302	F	1546	F	1146	G	1191	G	1228	G	1261	G	1290	G	1325	G	1349	G	1407	G	1503	G		
1305	F	1547	F	1148	G	1191	G	1229	G	1263	G	1290	G	1327	G	1352	G	1414	G	1523	G		
1317	F			1149	G	1194	G	1230	G	1265	G	1292	G	1328	G	1353	G	1425	G	1524	G		
1318	F			1151	G	1197	G	1230	G	1265	G	1292	G	1330	G	1354	G	1426	G	1525	G		

1070	H ^b	1191	^a h	1262	^a h	1317	^c h	1367	h	1462	^b
1071	H	1192	^b h	1263	^a h	1318	^a h	1368	h	1479	^b h
1106	H	1200	^a H	1266	h	1318	^c h	1369	h	1481	^b h
1107	H	1203	^b h	1267	^a h	1322	h	1370	h	1485	^b h
1123	^b h	1206	^b H	1269	h	1327	h	1374	^a	1502	^b H
1129	H	1207	^a h	1272	h	1328	^a h	1374	^b	1503	h
1135	H	1217	^a H	1273	h	1331	h	1375	h	1522	H
1143	H	1218	H	1275	^a h	1333	^c h	1376	h	1523	H
1153	H	1224	^b h	1275	^b h	1338	h	1382	^b	1524	H
1154	^a H	1231	^a h	1279	^a h	1340	^b h	1388	^a	1527	H
1154	^b h	1236	h	1282	h	1340	^c h	1396	^b h	1530	H
1161	^b h	1239	^a h	1283	^b h	1340	^a h	1397	^b h	1531	H
1173	^b h	1239	^c h	1284	h	1341	h	1399	^a h	1532	H
1174	^a h	1233	h	1285	h	1342	^a h	1408	^b h	1534	^a H
1186	^b h	1237	^b h	1290	^a h	1344	^b h	1407	^b	1534	^b H
1186	^c h	1245	^c h	1292	^a h	1345	h	1407	^a	1536	H
1188	^a h	1250	^a h	1293	^b h	1348	^b h	1414	^b h	1539	H
1189	^a h	1252	^b h	1294	h	1349	^a	1436	^b h	1546	H
1191	H	1254	^a h	1299	h	1352	h	1443	^a	1547	^a H
1192	h	1254	^b h	1300	h	1354	^b	1444	^b h	1547	^b H
1194	^a h	1257	h	1305	^b h	1360	h	1452	^b h	1556	H
1197	h	1258	^a h	1305	^a h	1362	h	1455	^b h		
1198	^b H	1258	^c h	1313	^a h	1366	^b	1461	h		

1066	I	1153	^a I	1194	^b I	1239	^a I	1258	I	1384	^b I	1318	^b I	1344	^b II	1388	^c	1462	I	1534	^b I	1547	R
1070	I	1153	^b I	1197	I	1239	^c I	1259	I	1285	I	1318	^c II	1345	I	1341	I	1479	^b I	1536	I	1522	^a R
1072	I	1154	^a I	1198	^b I	1230	^a I	1261	I	1280	I	1322	I	1348	I	1343	I	1481	^b I	1539	I	1522	R
1077	I	1154	^b I	1198	^a I	1233	^a I	1262	^a I	1290	^a I	1325	I	1349	^a I	1366	I	1485	^b I	1543	I	1531	R
1087	I	1156	I	1198	^a I	1234	^a I	1263	^a I	1290	^b I	1327	I	1352	I	1397	I	1487	I	1546	I	1567	^b R
1093	I	1161	^a I	1199	^a I	1234	^a I	1263	^b I	1292	^a I	1328	^a I	1353	I	1399	I	1444	I	1547	^a I	1481	^b k
1099	I	1161	^b I	1199	^b I	1237	^a I	1262	^a I	1293	I	1328	^b I	1354	I	1405	I	1498	I	1547	^b I	1522	^a R
1106	I	1164	I	1200	^a I	1238	^a I	1266	I	1294	I	1330	^a I	1360	I	1407	I	1501	I	1552	I	1524	R
1107	^a I	1173	^a I	1200	^b I	1240	^a I	1267	^a I	1297	I	1330	^b I	1361	I	1407	^b I	1502	^a I	1556	I		
1107	^b I	1174	^a I	1203	^a I	1241	I	1268	II	1299	I	1331	I	1362	I	1407	^a I	1503	^b I				
1108	I	1174	^b I	1203	^b I	1244	I	1272	I	1300	I	1333	^a I	1366	I	1414	I	1508	I				
1123	^a I	1183	I	1205	I	1245	^a I	1273	I	1302	I	1333	^b I	1367	I	1425	I	1514	I				
1123	^b I	1186	^a I	1206	^a I	1245	^c I	1274	I	1304	I	1333	^c I	1368	I	1426	^a I	1523	I				
1125	^a I	1186	^b I	1207	^a I	1245	^a I	1275	^a I	1305	I	1336	I	1369	I	1426	^b I	1523	I				
1125	^b I	1186	^c I	1217	^a I	1247	II	1275	^b I	1305	^a I	1337	^a I	1370	I	1436	I	1524	I				
1129	II	1188	I	1217	^b I	1249	I	1275	^c I	1305	^b I	1337	^c I	1374	^a I	1438	I	1525	I				
1133	I	1189	^a I	1218	I	1250	I	1278	I	1308	I	1340	^b I	1374	^b I	1443	^a I	1526	I				
1139	I	1189	^b I	1219	^a I	1251	I	1279	^a I	1311	I	1340	^b I	1375	I	1443	^b I	1527	I				
1143	I	1189	^a I	1221	^a I	1252	I	1280	I	1312	^a I	1340	^b I	1376	I	1444	I	1528	I				
1148	^a I	1189	^b I	1224	II	1254	^a I	1282	I	1315	^a I	1340	^a I	1381	^a I	1447	I	1530	I				
1148	^b I	1191	I	1226	I	1254	^b I	1283	^a I	1317	^a I	1341	^b I	1381	^b I	1448	I	1531	I				
1149	I	1192	I	1228	^a I	1257	I	1283	^b I	1317	^c I	1342	^a I	1382	I	1454	I	1532	I				
1151	I	1194	^a I	1228	^c I	1258	^a I	1284	^a I	1318	^a I	1344	^a I	1388	^a I	1461	I	1534	^a I				

1066 L	1154 L	1218 L	1258 L	1300 L	1340 L	1384 L	1427 L
1070 L	1156 L	1219 L	1259 L	1304 L	1340 L	1384 L	1427 L
1072 L	116 L	1221 L	1261 L	1305 L	1340 L	1388 L	1427 L
1077 L	1161 L	1224 L	1265 L	1308 L	1341 L	1388 L	1427 L
1087 L	1174 L	1224 L	1265 L	1311 L	1342 L	1391 L	1427 L
1093 L	1183 L	1228 L	1266 L	1313 L	1344 L	1393 L	1427 L
1099 L	1186 L	1228 L	1268 L	1317 L	1344 L	1396 L	1427 L
1106 L	1186 L	1229 L	1272 L	1318 L	1345 L	1397 L	1427 L
1107 L	1186 L	1230 L	1274 L	1318 L	1346 L	1399 L	1427 L
1107 L	1189 L	1233 L	1275 L	1318 L	1348 L	1414 L	1427 L
1108 L	1189 L	1234 L	1278 L	1322 L	1352 L	1425 L	1427 L
1123 L	1189 L	1234 L	1279 L	1325 L	1353 L	1426 L	1427 L
1123 L	1191 L	1237 L	1283 L	1327 L	1354 L	1436 L	1427 L
1125 L	1192 L	1238 L	1284 L	1328 L	1360 L	1438 L	1427 L
1125 L	1197 L	1240 L	1284 L	1330 L	1361 L	1443 L	1427 L
1133 L	1198 L	1241 L	1288 L	1331 L	1366 L	1444 L	1427 L
1135 L	1199 L	1244 L	1290 L	1333 L	1367 L	1447 L	1427 L
1139 L	1200 L	1247 L	1290 L	1333 L	1368 L	1452 L	1427 L
1143 L	1203 L	1249 L	1292 L	1336 L	1369 L	1461 L	1427 L
1148 L	1203 L	1250 L	1292 L	1337 L	1374 L	1462 L	1427 L
1148 L	1206 L	1251 L	1293 L	1337 L	1374 L	1479 L	1427 L
1149 L	1217 L	1254 L	1294 L	1338 L	1375 L	1481 L	1427 L
1153 L	1217 L	1257 L	1299 L	1340 L	1381 L	1485 L	1427 L

1066 M	1174 M	1219 M	1274 M	1318 H	1366 M	1427 M	1484 M
1070 M	1186 M	1233 M	1275 M	1322 M	1367 M	1427 M	1484 M
1072 M	1186 M	1234 M	1275 M	1328 M	1370 M	1427 M	1484 M
1077 M	1186 M	1234 M	1278 M	1330 M	1374 M	1427 M	1484 M
1087 M	1189 M	1237 M	1279 M	1333 M	1374 M	1427 M	1484 M
1093 M	1191 M	1238 M	1279 M	1333 M	1375 M	1427 M	1484 M
1099 M	1192 M	1241 M	1285 M	1337 M	1381 M	1427 M	1484 M
1106 M	1197 M	1244 M	1288 M	1338 M	1382 M	1427 M	1484 M
1107 M	1198 M	1245 M	1290 M	1340 M	1388 M	1427 M	1484 M
1107 M	1198 M	1250 M	1290 M	1340 M	1388 M	1427 M	1484 M
1108 M	1199 M	1254 M	1293 M	1341 M	1388 M	1427 M	1484 M
1123 M	1199 M	1257 M	1294 M	1342 M	1391 M	1427 M	1484 M
1123 M	1200 M	1258 M	1296 M	1344 M	1393 M	1427 M	1484 M
1133 M	1203 M	1259 M	1296 M	1344 M	1397 M	1427 M	1484 M
1143 M	1207 M	1261 M	1297 M	1345 M	1407 M	1427 M	1484 M
1149 M	1217 M	1262 M	1299 M	1346 M	1407 M	1427 M	1484 M
1153 M	1218 M	1263 M	1304 M	1348 M	1425 M	1427 M	1484 M
1154 M	1219 M	1263 M	1305 M	1349 M	1426 M	1427 M	1484 M
1154 M	1224 M	1265 M	1311 M	1352 M	1436 M	1427 M	1484 M
1156 M	1226 M	1266 M	1313 M	1353 M	1438 M	1427 M	1484 M
1161 M	1228 M	1267 M	1317 M	1354 M	1443 M	1427 M	1484 M
1173 M	1228 M	1272 M	1318 M	1361 M	1443 M	1427 M	1484 M
1174 M	1229 M	1273 M	1318 M	1362 M	1444 M	1427 M	1484 M

1066 N	1154 N	1199 NH	1214 N	1262 N	1284 N	1311 N	1346 N	1405 N	1514 N
1070 N	1154 N	1200 N	1234 N	1263 N	1285 N	1325 N	1348 N	1407 N	1522 N
1072 N	1156 N	1200 N	1237 N	1263 N	1290 N	1327 N	1349 N	1407 N	1523 N
1087 N	1161 N	1205 N	1238 N	1263 N	1292 N	1328 N	1352 N	1407 N	1524 N
1093 N	1164 N	1205 N	1238 N	1265 N	1293 N	1328 N	1353 N	1410 N	1525 N
1099 NH	1175 N	1205 N	1240 N	1265 N	1293 NH	1330 N	1354 N	1414 N	1526 N
1106 N	1174 N	1206 N	1241 N	1266 N	1294 N	1330 N	1360 N	1425 N	1527 N
1107 N	1183 N	1207 N	1244 N	1267 N	1296 N	1331 N	1361 N	1426 N	1528 N
1107 N	1186 N	1217 N	1245 N	1268 NH	1297 N	1335 N	1362 N	1426 N	1530 N
1108 N	1186 N	1217 N	1245 N	1269 N	1299 N	1335 N	1366 N	1436 N	1531 N
1123 N	1186 N	1218 N	1247 N	1272 N	1300 N	1336 N	1367 N	1443 N	1532 N
1123 N	1189 N	1219 N	1249 N	1274 N	1302 N	1337 N	1368 N	1444 N	1534 N
1125 N	1189 N	1221 N	1250 N	1275 N	1304 N	1337 N	1370 N	1447 N	1534 N
1129 N	1189 N	1224 N	1250 N	1275 N	1305 N	1337 N	1374 N	1454 N	1535 N
1133 N	1189 N	1224 N	1250 N	1275 N	1305 N	1337 N	1374 N	1454 N	1535 N
1135 N	1191 N	1226 N	1254 N	1278 N	1305 N	1340 N	1376 N	1455 N	1539 N
1139 N	1192 N	1228 N	1254 N	1279 N	1311 N	1340 N	1381 N	1461 N	1543 N
1143 N	1194 N	1228 N	1257 N	1279 N	1313 N	1340 N	1382 N	1462 N	1546 N
1148 N	1194 N	1229 N	1258 NH	1280 N	1315 N	1341 N	1382 N	1468 N	1547 N
1149 N	1197 NH	1229 N	1258 NH	1282 NH	1317 N	1342 N	1388 N	1487 N	1552 N
1151 N	1198 N	1230 N	1259 N	1283 N	1318 NH	1344 N	1391 N	1498 N	1556 N
1153 N	1198 N	1233 N	1261 N	1289 N	1318 N	1344 NH	1396 N	1501 N	
1153 N	1199 N	1234 N	1262 N	1284 NH	1318 N	1345 N	1399 N	1502 N	

1066 O	1154 O	1199 O	1214 O	1268 O	1300 O	1337 O	1376 O	1462 O	1552 O
1070 O	1154 O	1199 O	1214 O	1269 O	1304 O	1338 O	1381 O	1479 O	1556 O
1072 O	1156 O	1199 O	1217 O	1272 O	1305 O	1340 O	1382 O	1481 O	
1077 O	1161 O	1200 O	1238 O	1273 O	1305 O	1340 O	1388 O	1487 O	
1087 O	1161 O	1200 O	1241 O	1273 O	1308 O	1341 O	1388 O	1498 O	
1093 O	1164 O	1203 O	1244 O	1275 O	1311 O	1344 O	1388 O	1502 O	
1099 O	1175 O	1205 O	1245 O	1275 O	1313 O	1344 O	1391 O	1514 O	
1101 O	1174 O	1206 O	1247 O	1278 O	1315 O	1345 O	1393 O	1522 O	
1106 O	1174 O	1207 O	1249 O	1279 O	1317 O	1346 O	1397 O	1523 O	
1107 O	1183 O	1217 O	1250 O	1280 O	1318 O	1348 O	1405 O	1524 O	
1108 O	1186 O	1217 O	1251 O	1282 O	1318 O	1349 O	1407 O	1526 O	
1123 O	1186 O	1219 O	1254 O	1283 O	1318 O	1352 O	1407 O	1527 O	
1133 O	1188 O	1221 O	1257 O	1284 O	1322 O	1353 O	1407 O	1528 O	
1135 O	1189 O	1224 O	1258 O	1285 O	1325 O	1354 O	1410 O	1530 O	
1139 O	1189 O	1224 O	1258 O	1285 O	1328 O	1362 O	1415 O	1531 O	
1143 O	1189 O	1226 O	1259 O	1289 O	1330 O	1366 O	1426 O	1532 O	
1148 O	1191 O	1228 O	1261 O	1292 O	1330 O	1367 O	1426 O	1534 O	
1148 O	1192 O	1228 O	1262 O	1292 O	1331 O	1369 O	1443 O	1536 O	
1149 O	1194 O	1229 O	1263 O	1293 O	1335 O	1370 O	1444 O	1539 O	
1151 O	1194 O	1231 O	1263 O	1294 O	1335 O	1374 O	1447 O	1543 O	
1153 O	1197 O	1230 O	1266 O	1294 O	1336 O	1374 O	1452 O	1546 O	
1153 O	1198 O	1233 O	1267 O	1297 O	1337 O	1375 O	1455 O	1547 O	

1066 ^a P	1073 ^a P	1077 ^b P	1083 ^a P	1089 ^a P	1093 ^a P	1099 ^a P	1107 ^a P	1123 ^a P	1123 ^b P	1125 ^a P	1129 ^a P	1133 ^a P	1135 ^a P	1143 ^a P	1149 ^a P	1149 ^b P	1149 ^c P	1151 ^a P	1153 ^a P	1153 ^b P	1154 ^a P	1156 ^a P	1161 ^a P	1164 ^a P
1072 ^a P	1074 ^a P	1077 ^b P	1083 ^a P	1089 ^a P	1093 ^a P	1099 ^a P	1107 ^a P	1123 ^a P	1123 ^b P	1125 ^a P	1129 ^a P	1133 ^a P	1135 ^a P	1143 ^a P	1149 ^a P	1149 ^b P	1149 ^c P	1151 ^a P	1153 ^a P	1153 ^b P	1154 ^a P	1156 ^a P	1161 ^a P	1164 ^a P
1072 ^b P	1074 ^b P	1077 ^c P	1083 ^b P	1089 ^b P	1093 ^b P	1099 ^b P	1107 ^b P	1123 ^b P	1123 ^c P	1125 ^b P	1129 ^b P	1133 ^b P	1135 ^b P	1143 ^b P	1149 ^b P	1149 ^c P	1149 ^d P	1151 ^b P	1153 ^b P	1153 ^c P	1154 ^b P	1156 ^b P	1161 ^b P	1164 ^b P
1072 ^c P	1074 ^c P	1077 ^d P	1083 ^c P	1089 ^c P	1093 ^c P	1099 ^c P	1107 ^c P	1123 ^c P	1123 ^d P	1125 ^c P	1129 ^c P	1133 ^c P	1135 ^c P	1143 ^c P	1149 ^c P	1149 ^d P	1149 ^e P	1151 ^c P	1153 ^c P	1153 ^d P	1154 ^c P	1156 ^c P	1161 ^c P	1164 ^c P
1072 ^d P	1074 ^d P	1077 ^e P	1083 ^d P	1089 ^d P	1093 ^d P	1099 ^d P	1107 ^d P	1123 ^d P	1123 ^e P	1125 ^d P	1129 ^d P	1133 ^d P	1135 ^d P	1143 ^d P	1149 ^d P	1149 ^e P	1149 ^f P	1151 ^d P	1153 ^d P	1153 ^e P	1154 ^d P	1156 ^d P	1161 ^d P	1164 ^d P
1072 ^e P	1074 ^e P	1077 ^f P	1083 ^e P	1089 ^e P	1093 ^e P	1099 ^e P	1107 ^e P	1123 ^e P	1123 ^f P	1125 ^e P	1129 ^e P	1133 ^e P	1135 ^e P	1143 ^e P	1149 ^e P	1149 ^f P	1149 ^g P	1151 ^e P	1153 ^e P	1153 ^f P	1154 ^e P	1156 ^e P	1161 ^e P	1164 ^e P
1072 ^f P	1074 ^f P	1077 ^g P	1083 ^f P	1089 ^f P	1093 ^f P	1099 ^f P	1107 ^f P	1123 ^f P	1123 ^g P	1125 ^f P	1129 ^f P	1133 ^f P	1135 ^f P	1143 ^f P	1149 ^f P	1149 ^g P	1149 ^h P	1151 ^f P	1153 ^f P	1153 ^g P	1154 ^f P	1156 ^f P	1161 ^f P	1164 ^f P
1072 ^g P	1074 ^g P	1077 ^h P	1083 ^g P	1089 ^g P	1093 ^g P	1099 ^g P	1107 ^g P	1123 ^g P	1123 ^h P	1125 ^g P	1129 ^g P	1133 ^g P	1135 ^g P	1143 ^g P	1149 ^g P	1149 ^h P	1149 ⁱ P	1151 ^g P	1153 ^g P	1153 ^h P	1154 ^g P	1156 ^g P	1161 ^g P	1164 ^g P
1072 ^h P	1074 ^h P	1077 ⁱ P	1083 ^h P	1089 ^h P	1093 ^h P	1099 ^h P	1107 ^h P	1123 ^h P	1123 ⁱ P	1125 ^h P	1129 ^h P	1133 ^h P	1135 ^h P	1143 ^h P	1149 ^h P	1149 ⁱ P	1149 ^j P	1151 ^h P	1153 ^h P	1153 ⁱ P	1154 ^h P	1156 ^h P	1161 ^h P	1164 ^h P
1072 ⁱ P	1074 ⁱ P	1077 ^j P	1083 ⁱ P	1089 ⁱ P	1093 ⁱ P	1099 ⁱ P	1107 ⁱ P	1123 ⁱ P	1123 ^j P	1125 ⁱ P	1129 ⁱ P	1133 ⁱ P	1135 ⁱ P	1143 ⁱ P	1149 ⁱ P	1149 ^j P	1149 ^k P	1151 ⁱ P	1153 ⁱ P	1153 ^j P	1154 ⁱ P	1156 ⁱ P	1161 ⁱ P	1164 ⁱ P
1072 ^j P	1074 ^j P	1077 ^k P	1083 ^j P	1089 ^j P	1093 ^j P	1099 ^j P	1107 ^j P	1123 ^j P	1123 ^k P	1125 ^j P	1129 ^j P	1133 ^j P	1135 ^j P	1143 ^j P	1149 ^j P	1149 ^k P	1149 ^l P	1151 ^j P	1153 ^j P	1153 ^k P	1154 ^j P	1156 ^j P	1161 ^j P	1164 ^j P
1072 ^k P	1074 ^k P	1077 ^l P	1083 ^k P	1089 ^k P	1093 ^k P	1099 ^k P	1107 ^k P	1123 ^k P	1123 ^l P	1125 ^k P	1129 ^k P	1133 ^k P	1135 ^k P	1143 ^k P	1149 ^k P	1149 ^l P	1149 ^m P	1151 ^k P	1153 ^k P	1153 ^l P	1154 ^k P	1156 ^k P	1161 ^k P	1164 ^k P
1072 ^l P	1074 ^l P	1077 ^m P	1083 ^l P	1089 ^l P	1093 ^l P	1099 ^l P	1107 ^l P	1123 ^l P	1123 ^m P	1125 ^l P	1129 ^l P	1133 ^l P	1135 ^l P	1143 ^l P	1149 ^l P	1149 ^m P	1149 ⁿ P	1151 ^l P	1153 ^l P	1153 ^m P	1154 ^l P	1156 ^l P	1161 ^l P	1164 ^l P
1072 ^m P	1074 ^m P	1077 ⁿ P	1083 ^m P	1089 ^m P	1093 ^m P	1099 ^m P	1107 ^m P	1123 ^m P	1123 ⁿ P	1125 ^m P	1129 ^m P	1133 ^m P	1135 ^m P	1143 ^m P	1149 ^m P	1149 ⁿ P	1149 ^o P	1151 ^m P	1153 ^m P	1153 ⁿ P	1154 ^m P	1156 ^m P	1161 ^m P	1164 ^m P
1072 ⁿ P	1074 ⁿ P	1077 ^o P	1083 ⁿ P	1089 ⁿ P	1093 ⁿ P	1099 ⁿ P	1107 ⁿ P	1123 ⁿ P	1123 ^o P	1125 ⁿ P	1129 ⁿ P	1133 ⁿ P	1135 ⁿ P	1143 ⁿ P	1149 ⁿ P	1149 ^o P	1149 ^p P	1151 ⁿ P	1153 ⁿ P	1153 ^o P	1154 ⁿ P	1156 ⁿ P	1161 ⁿ P	1164 ⁿ P
1072 ^o P	1074 ^o P	1077 ^p P	1083 ^o P	1089 ^o P	1093 ^o P	1099 ^o P	1107 ^o P	1123 ^o P	1123 ^p P	1125 ^o P	1129 ^o P	1133 ^o P	1135 ^o P	1143 ^o P	1149 ^o P	1149 ^p P	1149 ^q P	1151 ^o P	1153 ^o P	1153 ^p P	1154 ^o P	1156 ^o P	1161 ^o P	1164 ^o P
1072 ^p P	1074 ^p P	1077 ^q P	1083 ^p P	1089 ^p P	1093 ^p P	1099 ^p P	1107 ^p P	1123 ^p P	1123 ^q P	1125 ^p P	1129 ^p P	1133 ^p P	1135 ^p P	1143 ^p P	1149 ^p P	1149 ^q P	1149 ^r P	1151 ^p P	1153 ^p P	1153 ^q P	1154 ^p P	1156 ^p P	1161 ^p P	1164 ^p P
1072 ^q P	1074 ^q P	1077 ^r P	1083 ^q P	1089 ^q P	1093 ^q P	1099 ^q P	1107 ^q P	1123 ^q P	1123 ^r P	1125 ^q P	1129 ^q P	1133 ^q P	1135 ^q P	1143 ^q P	1149 ^q P	1149 ^r P	1149 ^s P	1151 ^q P	1153 ^q P	1153 ^r P	1154 ^q P	1156 ^q P	1161 ^q P	1164 ^q P
1072 ^r P	1074 ^r P	1077 ^s P	1083 ^r P	1089 ^r P	1093 ^r P	1099 ^r P	1107 ^r P	1123 ^r P	1123 ^s P	1125 ^r P	1129 ^r P	1133 ^r P	1135 ^r P	1143 ^r P	1149 ^r P	1149 ^s P	1149 ^t P	1151 ^r P	1153 ^r P	1153 ^s P	1154 ^r P	1156 ^r P	1161 ^r P	1164 ^r P
1072 ^s P	1074 ^s P	1077 ^t P	1083 ^s P	1089 ^s P	1093 ^s P	1099 ^s P	1107 ^s P	1123 ^s P	1123 ^t P	1125 ^s P	1129 ^s P	1133 ^s P	1135 ^s P	1143 ^s P	1149 ^s P	1149 ^t P	1149 ^u P	1151 ^s P	1153 ^s P	1153 ^t P	1154 ^s P	1156 ^s P	1161 ^s P	1164 ^s P
1072 ^t P	1074 ^t P	1077 ^u P	1083 ^t P	1089 ^t P	1093 ^t P	1099 ^t P	1107 ^t P	1123 ^t P	1123 ^u P	1125 ^t P	1129 ^t P	1133 ^t P	1135 ^t P	1143 ^t P	1149 ^t P	1149 ^u P	1149 ^v P	1151 ^t P	1153 ^t P	1153 ^u P	1154 ^t P	1156 ^t P	1161 ^t P	1164 ^t P
1072 ^u P	1074 ^u P	1077 ^v P	1083 ^u P	1089 ^u P	1093 ^u P	1099 ^u P	1107 ^u P	1123 ^u P	1123 ^v P	1125 ^u P	1129 ^u P	1133 ^u P	1135 ^u P	1143 ^u P	1149 ^u P	1149 ^v P	1149 ^w P	1151 ^u P	1153 ^u P	1153 ^v P	1154 ^u P	1156 ^u P	1161 ^u P	1164 ^u P
1072 ^v P	1074 ^v P	1077 ^w P	1083 ^v P	1089 ^v P	1093 ^v P	1099 ^v P	1107 ^v P	1123 ^v P	1123 ^w P	1125 ^v P	1129 ^v P	1133 ^v P	1135 ^v P	1143 ^v P	1149 ^v P	1149 ^w P	1149 ^x P	1151 ^v P	1153 ^v P	1153 ^w P	1154 ^v P	1156 ^v P	1161 ^v P	1164 ^v P
1072 ^w P	1074 ^w P	1077 ^x P	1083 ^w P	1089 ^w P	1093 ^w P	1099 ^w P	1107 ^w P	1123 ^w P	1123 ^x P	1125 ^w P	1129 ^w P	1133 ^w P	1135 ^w P	1143 ^w P	1149 ^w P	1149 ^x P	1149 ^y P	1151 ^w P	1153 ^w P	1153 ^x P	1154 ^w P	1156 ^w P	1161 ^w P	1164 ^w P
1072 ^x P	1074 ^x P	1077 ^y P	1083 ^x P	1089 ^x P	1093 ^x P	1099 ^x P	1107 ^x P	1123 ^x P	1123 ^y P	1125 ^x P	1129 ^x P	1133 ^x P	1135 ^x P	1143 ^x P	1149 ^x P	1149 ^y P	1149 ^z P	1151 ^x P	1153 ^x P	1153 ^y P	1154 ^x P	1156 ^x P	1161 ^x P	1164 ^x P
1072 ^y P	1074 ^y P	1077 ^z P	1083 ^y P	1089 ^y P	1093 ^y P	1099 ^y P	1107 ^y P	1123 ^y P	1123 ^z P	1125 ^y P	1129 ^y P	1133 ^y P	1135 ^y P	1143 ^y P	1149 ^y P	1149 ^z P	1149 ^{aa} P	1151 ^y P	1153 ^y P	1153 ^z P	1154 ^y P	1156 ^y P	1161 ^y P	1164 ^y P
1072 ^z P	1074 ^z P	1077 ^{aa} P	1083 ^z P	1089 ^z P	1093 ^z P	1099 ^z P	1107 ^z P	1123 ^z P	1123 ^{aa} P	1125 ^z P	1129 ^z P	1133 ^z P	1135 ^z P	1143 ^z P	1149 ^z P	1149 ^{aa} P	1149 ^{ab} P	1151 ^z P	1153 ^z P	1153 ^{aa} P	1154 ^z P	1156 ^z P	1161 ^z P	1164 ^z P
1072 ^{aa} P	1074 ^{aa} P	1077 ^{ab} P	1083 ^{aa} P	1089 ^{aa} P	1093 ^{aa} P	1099 ^{aa} P	1107 ^{aa} P	1123 ^{aa} P	1123 ^{ab} P	1125 ^{aa} P	1129 ^{aa} P	1133 ^{aa} P	1135 ^{aa} P	1143 ^{aa} P	1149 ^{aa} P	1149 ^{ab} P	1149 ^{ac} P	1151 ^{aa} P	1153 ^{aa} P	1153 ^{ab} P	1154 ^{aa} P	1156 ^{aa} P	1161 ^{aa} P	1164 ^{aa} P
1072 ^{ab} P	1074 ^{ab} P	1077 ^{ac} P	1083 ^{ab} P	1089 ^{ab} P	1093 ^{ab} P	1099 ^{ab} P	1107 ^{ab} P	1123 ^{ab} P	1123 ^{ac} P	1125 ^{ab} P	1129 ^{ab} P	1133 ^{ab} P	1135 ^{ab} P	1143 ^{ab} P	1149 ^{ab} P	1149 ^{ac} P	1149 ^{ad} P	1151 ^{ab} P	1153 ^{ab} P	1153 ^{ac} P	1154 ^{ab} P	1156 ^{ab} P	1161 ^{ab} P	1164 ^{ab} P
1072 ^{ac} P	1074 ^{ac} P	1077 ^{ad} P	1083 ^{ac} P	1089 ^{ac} P	1093 ^{ac} P	1099 ^{ac} P	1107 ^{ac} P	1123 ^{ac} P	1123 ^{ad} P	1125 ^{ac} P	1129 ^{ac} P	1133 ^{ac} P	1135 ^{ac} P	1143 ^{ac} P	1149 ^{ac} P	1149 ^{ad} P	1149 ^{ae} P	1151 ^{ac} P	1153 ^{ac} P	1153 ^{ad} P	1154 ^{ac} P	1156 ^{ac} P	1161 ^{ac} P	1164 ^{ac} P
1072 ^{ad} P	1074 ^{ad} P	1077 ^{ae} P	1083 ^{ad} P	1089 ^{ad} P	1093 ^{ad} P	1099 ^{ad} P	1107 ^{ad} P	1123 ^{ad} P	1123 ^{ae} P	1125 ^{ad} P	1129 ^{ad} P	1133 ^{ad} P	1135 ^{ad} P	1143 ^{ad} P	1149 ^{ad} P	1149 ^{ae} P	1149 ^{af} P	1151 ^{ad} P	1153 ^{ad} P	1153 ^{ae} P	1154 ^{ad} P	1156 ^{ad} P	1161 ^{ad} P	1164 ^{ad} P
1072 ^{ae} P	1074 ^{ae} P	1077 ^{af} P	1083 ^{ae} P	1089 ^{ae} P	1093 ^{ae} P	1099 ^{ae} P	1107 ^{ae} P	1123 ^{ae} P	1123 ^{af} P	1125 ^{ae} P	1129 ^{ae} P	1133 ^{ae} P	1135 ^{ae} P	1143 ^{ae} P	1149 ^{ae} P									

1066	z	1155	s	1194	s	1288	s	1258	s	1283	s	1317	s	1344	s	1388	s	1452	s	1534	s
1070	z	1153	s	1197	s	1222	s	1258	s	1284	s	1318	s	1344	s	1388	s	1454	s	1536	s
1072	s	1154	s	1198	s	1223	s	1259	s	1284	s	1318	s	1345	s	1388	s	1455	s	1539	s
1077	z	1156	s	1198	s	1230	s	1261	s	1285	s	1318	s	1346	s	1391	s	1461	s	1546	s
1087	s	1161	s	1198	s	1233	s	1262	s	1288	s	1323	s	1349	s	1393	s	1462	s	1547	s
1093	s	1161	s	1199	s	1234	s	1263	s	1290	s	1323	s	1352	s	1396	s	1479	s	1552	s
1099	s	1164	s	1199	s	1234	s	1263	s	1290	s	1327	s	1353	s	1397	s	1481	s	1556	s
1107	s	1173	s	1200	s	1237	s	1265	s	1292	s	1338	s	1354	s	1399	s	1485	s		
1107	s	1174	s	1200	s	1238	s	1266	s	1292	s	1330	s	1354	s	1399	s	1485	s		
1114	z	1174	s	1203	s	1240	s	1267	s	1294	s	1330	s	1360	s	1405	s	1487	s		
1123	s	1183	s	1205	s	1241	s	1267	s	1294	s	1331	s	1361	s	1407	s	1494	s		
1123	s	1186	s	1205	s	1244	s	1269	s	1297	s	1331	s	1362	s	1407	s	1498	s		
1125	s	1186	s	1206	s	1245	s	1272	s	1299	s	1333	s	1366	s	1407	s	1502	s		
1125	s	1186	s	1206	s	1245	s	1272	s	1299	s	1333	s	1367	s	1410	s	1502	s		
1125	s	1186	s	1207	s	1245	s	1273	s	1300	s	1335	s	1368	s	1414	s	1514	s		
1129	z	1188	s	1217	s	1245	s	1274	s	1302	s	1336	s	1369	s	1425	s	1522	s		
1133	s	1189	s	1217	s	1247	s	1275	s	1304	s	1337	s	1370	s	1426	s	1524	s		
1135	s	1189	s	1218	s	1249	s	1275	s	1305	s	1337	s	1374	s	1426	s	1525	s		
1139	s	1189	s	1219	s	1250	s	1275	s	1305	s	1338	s	1374	s	1436	s	1526	s		
1143	s	1189	s	1221	s	1251	s	1278	s	1305	s	1340	s	1375	s	1438	s	1527	s		
1148	s	1191	s	1224	s	1252	s	1279	s	1311	s	1340	s	1376	s	1443	s	1530	s		
1148	s	1192	s	1224	s	1254	s	1280	s	1313	s	1340	s	1381	s	1443	s	1531	s		
1149	s	1193	s	1226	s	1254	s	1282	s	1315	s	1341	s	1381	s	1444	s	1532	s		
1151	s	1194	s	1228	s	1257	s	1283	s	1317	s	1342	s	1382	s	1447	s	1534	s		

1066	T	1199	T	1238	T	1275	T	1328	T	1366	T	1455	T
1123	T	1200	T	1241	T	1279	T	1330	T	1367	T	1461	T
1135	T	1205	T	1244	T	1280	T	1331	T	1374	T	1479	T
1139	T	1206	T	1245	T	1282	T	1333	T	1374	T	1481	T
1143	T	1206	T	1245	T	1283	T	1333	T	1381	T	1487	T
1148	T	1207	T	1245	T	1284	T	1336	T	1388	T	1498	T
1148	T	1217	T	1247	T	1285	T	1337	T	1388	T	1501	T
1153	T	1217	T	1249	T	1290	T	1337	T	1388	T	1502	T
1159	T	1218	T	1250	T	1292	T	1338	T	1391	T	1503	T
1161	T	1219	T	1252	T	1293	T	1340	T	1393	T	1522	T
1161	T	1221	T	1254	T	1294	T	1340	T	1396	T	1523	T
1175	T	1224	T	1258	T	1299	T	1340	T	1399	T	1524	T
1175	T	1224	T	1258	T	1304	T	1341	T	1405	T	1526	T
1174	T	1224	T	1259	T	1305	T	1342	T	1407	T	1527	T
1183	T	1228	T	1261	T	1305	T	1344	T	1407	T	1530	T
1188	T	1229	T	1262	T	1308	T	1345	T	1414	T	1531	T
1189	T	1230	T	1263	T	1313	T	1346	T	1425	T	1532	T
1189	T	1233	T	1265	T	1317	T	1348	T	1426	T	1534	T
1192	T	1234	T	1266	T	1318	T	1349	T	1436	T	1539	T
1193	T	1234	T	1267	T	1318	T	1352	T	1443	T	1546	T
1194	T	1234	T	1271	T	1322	T	1353	T	1444	T	1547	T
1195	T	1237	T	1273	T	1327	T	1360	T	1447	T	1556	T
1195	T	1237	T	1274	T	1328	T	1362	T	1452	T		

1066 V	1155 V	1197 VU	1230 V	1261 V	1296 V	1340 V	1397 u	1514 u
1090 V	1153 V	1198 V	1233 VU	1262 V	1299 V	1341 V	1399 n	1524 V
1072 V	1154 V	1198 VU	1234 V	1263 VU	1303 V	1344 V	1410 u	1526 V
1077 V	1154 V	1198 V	1234 V	1263 V	1303 V	1344 V	1414 u	1527 V
1087 V	1161 V	1199 V	1234 V	1263 V	1308 V	1345 u	1425 u	1528 V
1093 V	1161 V	1199 V	1237 V	1266 V	1311 V	1348 u	1426 u	1530 V
1099 V	1164 V	1200 V	1237 V	1267 V	1313 V	1349 V	1436 u	1531 V
1101 V	1173 V	1203 V	1240 V	1272 V	1318 V	1353 V	1438 u	1532 V
1106 V	1174 V	1203 V	1241 V	1275 VU	1318 V	1354 u	1443 V	1534 V
1107 V	1174 V	1205 V	1244 V	1274 V	1318 V	1360 u	1443 V	1534 V
1107 V	1183 V	1206 V	1245 V	1275 V	1322 V	1361 V	1444 u	1536 V
1108 V	1186 V	1207 V	1245 V	1278 V	1327 V	1362 V	1447 u	1539 V
1114 V	1186 V	1217 V	1245 V	1279 V	1328 V	1366 u	1452 u	1546 V
1123 V	1186 V	1218 V	1247 V	1279 V	1330 V	1370 u	1461 u	1547 V
1123 V	1188 V	1219 V	1249 VU	1280 V	1331 V	1374 V	1462 u	1547 V
1129 V	1189 V	1221 V	1250 V	1283 V	1333 V	1375 u	1479 u	1556 V
1133 V	1189 V	1224 V	1251 V	1283 V	1335 V	1381 u	1485 u	
1135 V	1189 V	1224 V	1254 V	1284 V	1336 V	1382 u	1487 V	
1139 V	1191 V	1226 V	1254 V	1284 V	1337 V	1388 u	1494 V	
1143 V	1192 V	1228 V	1257 V	1288 V	1338 V	1388 V	1498 V	
1148 V	1193 V	1228 V	1258 V	1292 V	1340 V	1391 u	1501 V	
1148 V	1194 V	1229 V	1258 VU	1293 V	1340 V	1393 u	1502 V	
1149 V	1194 V	1229 V	1259 VU	1294 V	1340 V	1396 u	1503 u	

1070 VV	1267 W	1340 W	1498 W	1089 X	1527 X	1200 V	1405 u	AE	DE (cum 2)	OR
1087 W	1272 W	1341 W	1501 W	1107 X	1533 X	1218 V	1407 u	1354 E	1375 E	1199 W
1107 W	1273 W	1344 W	1502 W	1123 X	1539 X	1219 V	1426 V	AN	1381 V	1265 W
1156 W	1278 W	1344 W	1503 W	1135 X	1540 X	1219 V	1436 V	1174 AN	1386 V	1275 W
1164 W	1283 W	1346 W	1514 W	1143 X	1540 X	1219 V	1436 V	1244 AN	1397 V	1293 W
1173 W	1284 W	1348 W	1523 VV	1154 X	1540 X	1219 V	1436 V	1252 AN	1403 V	1310 W
1183 W	1288 W	1360 W	1524 W	1161 X	1541 X	1219 V	1436 V	1318 AN	ER	1370 W
1186 W	1290 W	1367 W	1528 W	1189 X	1549 X	1219 V	1436 V	AR	1245 E	1381 W
1189 W	1290 W	1367 W	1531 W	1199 X	1549 X	1219 V	1436 V	1517 AR	ET	TI
1189 W	1292 W	1370 W	1536 VV	1207 X	1549 X	1219 V	1436 V	ARD	1556 E	1556 T
1200 W	1294 W	1381 W	1543 W	1218 X	1549 X	1219 V	1436 V	1174 AR	LL	TR
1205 W	1304 W	1388 W	1547 W	1218 X	1549 X	1219 V	1436 V	AV	1241 E	1245 W
1217 W	1305 W	1388 W	1547 W	1228 X	1549 X	1219 V	1436 V	1263 AV	1267 E	VH
1224 W	1308 W	1391 W	1547 W	1233 X	1549 X	1219 V	1436 V	CA	HE	UM
1224 W	1313 W	1393 W	1547 W	1233 X	1549 X	1219 V	1436 V	1556 CA	1249 ME	VN
1237 W	1322 W	1405 W	1547 W	1233 X	1549 X	1219 V	1436 V	DE	NE	VN
1240 W	1323 W	1407 W	1547 W	1233 X	1549 X	1219 V	1436 V	1189 DE	1225 NE	UN
1249 W	1327 W	1407 W	1547 W	1233 X	1549 X	1219 V	1436 V	1273 DE	ND	
1250 W	1331 W	1438 W	1547 W	1233 X	1549 X	1219 V	1436 V	1284 DE	1493 ND	
1258 W	1336 W	1447 W	1547 W	1233 X	1549 X	1219 V	1436 V	1290 DE	OB	
1262 W	1337 W	1461 W	1547 W	1233 X	1549 X	1219 V	1436 V	1349 DE	1373 OB	
1263 W	1338 W	1462 W	1547 W	1233 X	1549 X	1219 V	1436 V	1366 DE		
1266 W	1340 W	1487 W	1547 W	1233 X	1549 X	1219 V	1436 V	1367 DE		

KEY TO THE FIGURES

- 1066 William I, 1st Great Seal.
 1070 William I, 2nd Great Seal.
 1072 Osbern, bishop of Exeter.
 1077 Gundulf, bishop of Rochester.
 1087 William II, Great Seal.
 1093 Anselm, archbishop of Canterbury.
 1099 Ranulf Flambard, bishop of Durham.
 1101 Henry I, 2nd Great Seal.
 1106 Henry I, 3rd Great Seal.
 1107 *a* Henry I, 4th Great Seal.
 1107 *b* William Warelwast, bishop of Exeter.
 1108 Richard de Beames I, bishop of London.
 1114 Ralph, archbishop of Canterbury.
 1123 *a* Alexander, bishop of Lincoln.
 1123 *b* William of Corbeille, archbishop of Canterbury.
 1125 *a* Seffrid I, bishop of Chichester.
 1125 *b* Simon, bishop of Worcester.
 1129 Henry of Blois, bishop of Winchester.
 1133 Geoffrey Rufus, bishop of Durham.
 1135 Stephen, 1st Great Seal.
 1139 Theobald, archbishop of Canterbury.
 1143 Stephen, 2nd Great Seal.
 1148 *a* Robert Chesney, bishop of Lincoln.
 1148 *b* Hilary, bishop of Chichester.
 1149 Nicholas Gurgant, bishop of Llandaff.
 1151 John Pagham, bishop of Worcester.
 1153 *a* Richard de Beames II, bishop of London.
 1153 *b* Hugh Puiset, bishop of Durham.
 1154 *a* Henry I, 1st Great Seal.
 1154 *b* Roger de Pont l'Evêque, archbishop of York.
 1156 William Turbe, bishop of Norwich.
 1161 *a* Richard Peche, bishop of Coventry.
 1161 *b* Bartholomew, bishop of Exeter.
 1164 Roger, bishop of Worcester.
 1173 *a* Richard Toclive, bishop of Winchester.
 1173 *b* " " , counter.
 1174 *a* Richard, archbishop of Canterbury.
 1174 *b* " " , counter.
 1183 William of Coutances, bishop of Lincoln.
 1186 *a* William Vere, bishop of Hereford.
 1186 *b* John FitzLuke, bishop of Exeter.
 1186 *c* Hugh of Avalon, bishop of Lincoln.
 1188 *a* Hugh Nonant, bishop of Coventry and Lichfield.
 1188 *b* " " , counter.
 1189 *a* Richard I, 1st Great Seal.
 1189 *b* Godfrey Lucy, bishop of Winchester.
 1189 *c* " " , counter.
 1189 *d* William Longchamp, bishop of Ely.
 1189 *e* " " , counter.
 1189 *f* Hubert Walter, bishop of Salisbury, counter.
 1191 Geoffrey, archbishop of York.
 1192 Savaric, bishop of Bath and Glastonbury.
 1193 *a* Hubert Walter, archbishop of Canterbury.
 1193 *b* Henry of Abergavenny, bishop of Llandaff.
 1194 *a* Herbert Poore, bishop of Salisbury.
 1194 *b* Henry Marshall, bishop of Exeter.
 1197 Philip of Poitou, bishop of Durham.
 1198 *a* Richard I, 2nd Great Seal.
 1198 *b* Eustace, bishop of Ely.
 1198 *c* " " , counter.
 1198 *d* Geoffrey Muschamp, bishop of Coventry and Lichfield.
 1198 *e* " " , counter.
 1199 *a* John.
 1199 *b* St. Austin's Abbey, Canterbury: dated on matrix.
 1200 *a* Giles de Braose, bishop of Hereford.
 1200 *b* Ipswich town: dated by accounts.
 1203 *a* Bernard, bishop of Carlisle.
 1203 *b* Nicholas of Meaux, bishop of Man.
 1205 Peter des Roches, bishop of Winchester.
 1206 *a* Jocelin, bishop of Bath and Wells.
 1206 *b* " " , counter.
 1207 *a* Stephen Langton, archbishop of Canterbury.
 1207 *b* " " , counter.
 1217 *a* Walter Gray, archbishop of York.
 1217 *b* Richard Poore, bishop of Salisbury.
 1217 *c* " " , counter.
 1218 Henry III, 1st Great Seal: dated by entry in Close Roll.
 1219 *a* Hugh Foliot, bishop of Hereford.
 1219 *b* " " , counter.
 1221 *a* Eustace Fauconberg, bishop of London.
 1221 *b* " " , counter.
 1224 *a* Walter Mauclerc, bishop of Carlisle.
 1224 *b* William Briwere, bishop of Exeter.
 1224 *c* " " , counter.

176 THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS

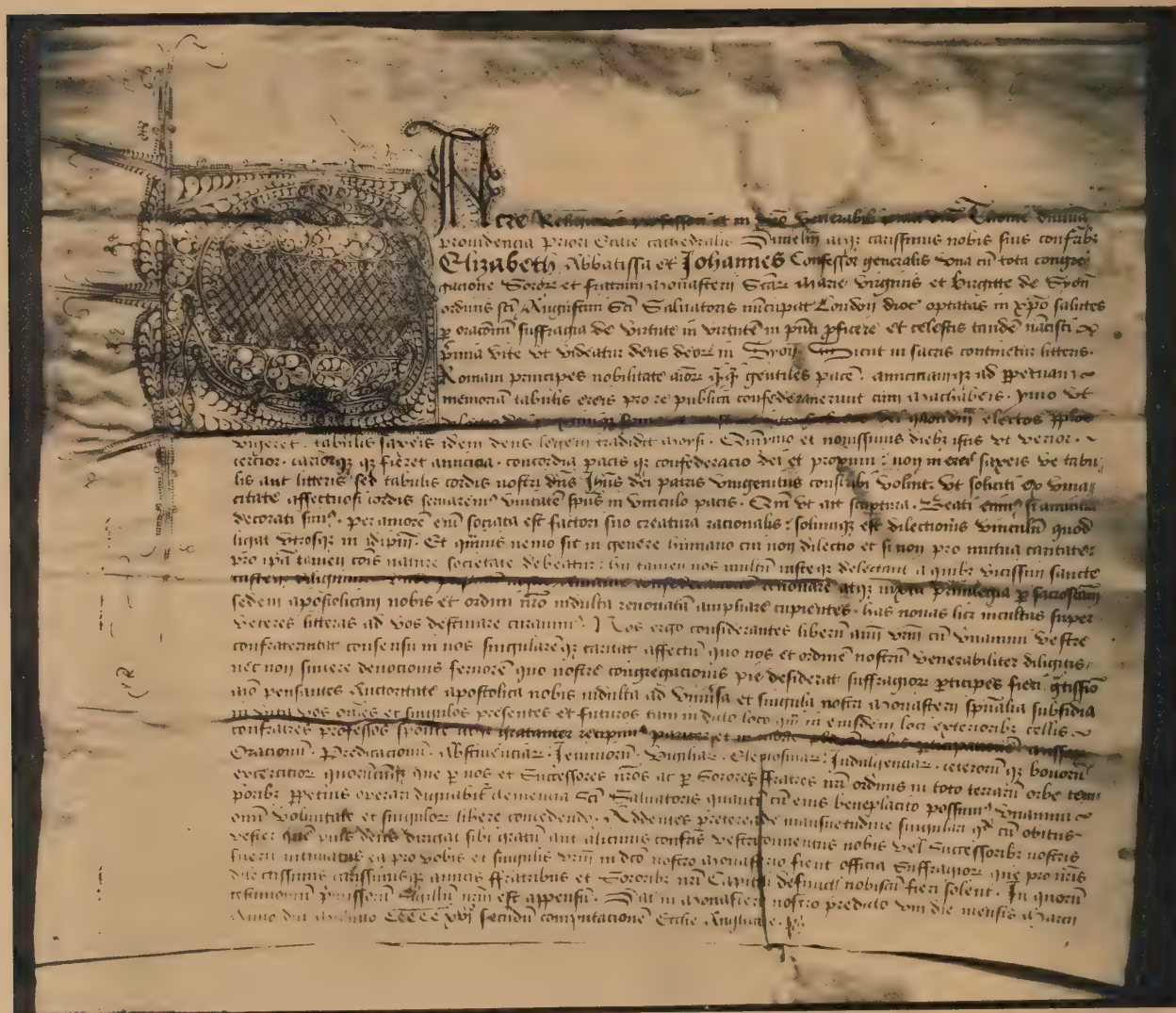
- 1226 Thomas Blunville, bishop of Norwich.
 1228 *a* Robert Bingham, bishop of Salisbury.
 1228 *b* " " , counter.
 1228 *c* Richard Poore, bishop of Durham.
 1229 *a* Richard Grant of Wethershed, arch-
 bishop of Canterbury.
 1229 *b* " " , counter.
 1229 *c* Hugh of Northwold, bishop of Ely.
 1229 *d* " " , counter.
 1230 *a* Elias of Radnor, bishop of Llandaff.
 1230 *b* " " , counter.
 1233 Canterbury Cathedral Priory, 3rd seal:
 dated by accounts.
 1234 *a* Edmund Rich, archbishop of Canterbury.
 1234 *b* " " , counter.
 1234 *c* Ralph of Maidstone, bishop of Hereford.
 1234 *d* " " , counter.
 1237 *a* Walter Cantilupe, bishop of Worcester.
 1237 *b* " " , counter.
 1238 *a* Richard of Wendover, bishop of Ro-
 chester.
 1238 *b* " " , counter.
 1240 William of Christ Church, bishop of
 Llandaff.
 1241 Merton Priory, Surrey: dated by entry
 in *Annals of Waverley*.
 1244 Fulk Basset, bishop of London.
 1245 *a* Roger of Weseham, bishop of Coventry
 and Lichfield.
 1245 *b* " " , counter.
 1245 *c* Boniface of Savoy, archbishop of Canter-
 bury.
 1245 *d* Richard of Wyche, bishop of Chichester.
 1245 *e* " " , counter.
 1247 Silvester Everdon, bishop of Carlisle.
 1249 Walter Kirkham, bishop of Durham.
 1250 *a* Aymer de Valence, bishop-elect of Salis-
 bury.
 1250 *b* " " , counter.
 1251 Laurence of St. Martin, bishop of
 Rochester.
 1252 Adam Stanford, archdeacon of Chester.
 1254 *a* Henry of Lexington, bishop of Lincoln.
 1254 *b* John Climping, bishop of Chichester.
 1254 *c* " " , counter.
 1257 Hugh Balsham, bishop of Ely.
 1258 *a* Godfrey Ludham, archbishop of York.
 1258 *b* " " , counter.
 1258 *c* Norwich Cathedral Priory, 2nd seal:
 dated on matrix.
 1259 Henry III, 2nd Great Seal.
 1261 Robert Stickill, bishop of Durham.
 1262 *a* John Gervaise, bishop of Winchester.
 1262 *b* " " , counter.
 1263 *a* Henry III, so-called 3rd Great Seal.
 1263 *b* Walter de la Wyle, bishop of Salisbury.
 1263 *c* " " , counter.
 1265 *a* Walter Giffard, archbishop-elect of York.
 1265 *b* " " , counter.
 1266 Walter Giffard, archbishop of York.
 1267 *a* William Bitton II, bishop of Bath and
 Wells.
 1267 *b* " " , counter.
 1268 Anian II, bishop of St. Asaph.
 1269 John le Breton, bishop of Hereford.
 1272 Edward I, Great Seal.
 1273 Robert Kilwardby, archbishop of Can-
 terbury.
 1274 Robert of Holy Island, bishop of Dur-
 ham.
 1275 *a* Robert Burnell, bishop of Bath and
 Wells.
 1275 *b* Thomas Cantelupe, bishop of Here-
 ford.
 1275 *c* Mark of Galloway, bishop of Man.
 1278 William Middleton, bishop of Norwich.
 1279 *a* John Peckham, archbishop of Canter-
 bury.
 1279 *b* " " , counter.
 1280 Peter Quivil, bishop of Exeter.
 1282 John of Pontoise, bishop of Winchester.
 1283 *a* Gloucester Statute Merchant.
 1283 *b* Richard Swinfield, bishop of Hereford.
 1284 *a* Anthony Bek, bishop of Durham.
 1284 *b* William of Louth, archdeacon of Dur-
 ham.
 1285 John Romanus, archbishop of York.
 1288 William Corner, bishop of Salisbury.
 1290 *a* Robert Redeswelle, archdeacon of Ches-
 ter.
 1290 *b* William of Louth, bishop of Ely.
 1292 *a* John Halton, bishop of Carlisle.
 1292 *b* Exeter Statute Merchant.
 1293 Leeds Priory, Kent: dated on matrix.
 1294 Winchester Cathedral Priory, 2nd seal:
 dated on matrix.
 1296 *a* David Martyn, bishop of St. Davids.
 1296 *b* " " , seal
ad causas.
 1297 Simon of Ghent, bishop of Salisbury.

THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS 177

- 1299 Margaret, 2nd wife of Edward I: dated by accounts.
- 1300 John Dalderby, bishop of Lincoln.
- 1302 William of Gainsborough, bishop of Worcester.
- 1304 William Greenfield, archbishop of York.
- 1305^a Dover town: dated on back of matrix.
- 1305^b Henry Merewell, bishop of Winchester.
- 1305^c " " " , counter.
- 1305^d John Langton, bishop of Chichester.
- 1308 Walter Reynolds, bishop of Worcester.
- 1311 Richard Kellawe, bishop of Durham.
- 1313^a Walter Reynolds, archbishop of Canterbury.
- 1313^b " " " , counter.
- 1315^a Roger Mortival, bishop of Salisbury.
- 1315^b " " " , counter.
- 1317^a William Melton, archbishop of York.
- 1317^b " " " , counter.
- 1317^c Adam of Orleton, bishop of Hereford.
- 1318^a Canterbury city: dated on matrix.
- 1318^b Lewis Beaumont, bishop of Durham.
- 1318^c Littlemore Priory, Oxon.: dated on matrix.
- 1322 Haltemprice Priory, Yorks.: dated on matrix.
- 1325 William Aymain, bishop of Norwich.
- 1327 Edward III, 2nd Great Seal.
- 1328^a Reading Abbey, Berks., 2nd seal: dated on matrix.
- 1328^b Simon Meopham, archbishop of Canterbury.
- 1330^a Robert Wyville, bishop-elect of Salisbury.
- 1330^b Robert Wyville, bishop of Salisbury.
- 1331 Hull Statute Merchant.
- 1333^a Robert Graystones, bishop of Durham.
- 1333^b Richard of Bury, bishop of Durham.
- 1333^c John Stratford, archbishop of Canterbury.
- 1333^d " " " , counter.
- 1336 Canterbury Statute Merchant.
- 1337^a Simon Montague, bishop of Ely.
- 1337^b " " " , counter.
- 1337^c Anthony Bek, bishop of Norwich.
- 1338 Edward III, 1st seal of absence.
- 1340^a Queen's College, Oxford.
- 1340^b Ralph Stratford, bishop of London.
- 1340^c Edward III, 3rd Great Seal.
- 1340^d Edward III, 2nd seal of absence.
- 1341 Edward III, 4th Great Seal.
- 1342^a William de la Zouch, archbishop of York.
- 1342^b " " " , counter.
- 1344^a William Bateman, bishop of Norwich.
- 1344^b Thomas Beauchamp, earl of Warwick: dated on matrix.
- 1345 Thomas Hatfield, bishop of Durham.
- 1346 William Edyngton, bishop of Winchester, secret.
- 1348 Henry of Walton, archdeacon of Richmond.
- 1349^a Simon Islip, archbishop of Canterbury.
- 1349^b " " " , counter.
- 1352 John Thoresby, archbishop of York.
- 1353 Staple of Lincoln.
- 1354 Michael of Northburgh, bishop of London.
- 1360 Edward III, 5th Great Seal.
- 1361 Adam of Houghton, bishop of St. Davids.
- 1362 Simon Langham, bishop of Ely, counter.
- 1366 Simon Langham, archbishop of Canterbury.
- 1367 William of Wykeham, bishop of Winchester.
- 1368 Richard of Ravenser, archdeacon of Lincoln.
- 1369 John Harewell, bishop of Bath and Wells, seal *ad causas*.
- 1370 Henry Despencer, bishop of Norwich.
- 1374^a Thomas Arundel, bishop of Ely.
- 1374^b Alexander Nevill, archbishop of York.
- 1375 Ralph Ergham, bishop of Salisbury.
- 1376 John Swaffham, bishop of Bangor.
- 1381^a William Courtenay, archbishop of Canterbury.
- 1381^b London, 2nd mayoralty seal: dated by accounts.
- 1382 John Fordham, bishop of Durham.
- 1388^a Lothingland Hundred, Labourers' passes.
- 1388^b North Stowe Hundred, Labourers' passes.
- 1388^c Walter Skirlaw, bishop of Durham.
- 1391 Edward, earl of Rutland, as admiral of England.
- 1393 Staple of Westminster.
- 1396 Thomas Arundel, archbishop of Canterbury.
- 1397 John Campden, archdeacon of Surrey.
- 1399 Henry IV, the Gold Seal.
- 1405 Henry Beaufort, bishop of Winchester.

178 THE EPIGRAPHY OF MEDIEVAL ENGLISH SEALS

- 1407 *a* William of Westacre, archdeacon of Norwich.
 1407 *b* Henry Bowet, archbishop of York.
 1407 *c* " " " seal
ad causas.
 1407 *d* Thomas Peverell, bishop of Worcester.
 1410 Fountains Abbey, 2nd seal: dated on matrix (but see *Archaeologia*, lxxviii, 17, n. 1).
 1414 Henry Chicheley, archbishop of Canterbury.
 1425 Shrewsbury town: dated on matrix.
 1426 *a* Philip Morgan, bishop of Ely.
 1426 *b* William Gray, bishop of London.
 1436 John Holand, as admiral of England.
 1438 William Ascough, bishop of Salisbury.
 1443 *a* John Stafford, archbishop of Canterbury, seal *ad causas.*
 1443 *b* Thomas Beckington, bishop of Bath and Wells.
 1444 Thomas Bouchier, bishop of Ely.
 1447 William of Waynflete, bishop of Winchester.
 1452 John Kemp, archbishop of Canterbury.
 1454 William Gray, bishop of Ely.
 1455 Thomas Burton, bishop of Man.
 1461 Edward IV, 1st Great Seal.
 1462 Edward IV, 2nd Great Seal.
 1479 John Morton, bishop of Ely.
 1481 John Coke, archdeacon of Lincoln.
 1485 Henry VII, Great Seal.
 1487 Peter Courtenay, bishop of Winchester.
 1494 Richard Fox, bishop of Durham.
 1498 Silvester Gigliis, bishop of Worcester.
 1501 Richard Fox, bishop of Winchester.
 1502 *a* William Senhouse, bishop of Durham.
 1502 *b* Merchant Taylors' Company, London: dated by accounts.
 1503 William Wareham, archbishop of Canterbury.
 1514 William Atwater, bishop of Lincoln, seal *ad causas.*
 1522 John Kite, bishop of Carlisle.
 1523 John Clarke, bishop of Bath and Wells.
 1524 William Burbanke, archdeacon of Carlisle.
 1525 Laurence Campeggio, bishop of Salisbury.
 1526 Crutched Friars, London (so-called, but probably a fraternity): dated on matrix.
 1527 Henry VIII, Golden bulla.
 1528 Thomas Wolsey, bishop of Winchester.
 1530 Cuthbert Tunstall, bishop of Durham.
 1531 Stephen Gardiner, bishop of Winchester.
 1532 Henry VIII, 2nd Great Seal.
 1534 *a* Thomas Cranmer, archbishop of Canterbury, 2nd seal.
 1534 *b* John Salcote, bishop of Bangor.
 1536 William Rugge, bishop of Norwich.
 1539 John Salcote, bishop of Salisbury.
 1543 Nicholas Heath, bishop of Worcester.
 1546 Trinity College, Cambridge: dated on matrix.
 1547 *a* Edward VI, Great Seal.
 1547 *b* Henry Holbeach, bishop of Lincoln.
 1552 John Taylor, bishop of Lincoln, seal *ad causas.*
 1556 Reginald Pole, archbishop of Canterbury.



Letter of Fraternity from the Brigettines of Syon to the Prior and Convent of Durham, 1516 (8)

IX.—*Some Further Letters of Fraternity.* By the Rev. Prebendary
CLARK-MAXWELL, M.A., F.S.A.

Read 11th April 1929

SINCE the publication in *Archaeologia*¹ of the paper read by me before the Society on 12th February 1925, I have come across a considerable number, nearly one hundred in all, of Letters of Fraternity, in addition to the one hundred and seventy-eight which I was able to include in the Appendix to my paper. I owe the knowledge of most of these to the kindness of the same correspondents whose help I acknowledged at the end of my article, notably to our Fellows Dr. Rose Graham and Dr. H. H. E. Craster, Mr. R. C. Fowler, whose recent loss we have to deplore, and Dr. A. G. Little, F.B.A. My thanks are also due to the Duke of Rutland, F.S.A., for kindly allowing me to examine the Cluniac letter of fraternity from Lenton Priory, now at Belvoir Castle; to T. Bruce Dilks, Esq., of Bridgwater, for bringing to my notice the nine fraternity letters preserved among the Borough archives there, and for lending me his transcripts of them; and to the Dean and Chapter of Durham, for permitting the reproduction of the Brigettine letter from Syon to Durham which is illustrated in pl. LXVI.²

The item of principal interest perhaps in my new material is the example of a Cluniac letter which enables us to fill a rather puzzling gap in the list of examples. It is among the MSS. of the Duke of Rutland at Belvoir Castle and is calendared in the Report of the Historical Manuscripts Commission on that collection (vol. iv, p. 26).

A fresh Cistercian example has come to light among the Greenwell Deeds in Newcastle-on-Tyne Public Library (no. 68). It is issued by Theobald, Abbot of Cîteaux, and the General Chapter, to William de Kellow, in 1292. This corresponds almost exactly with those issued to Lacock (1253), Sir John Hesketh (1329) and Sir Geoffrey Staunton (1436), and shows how stereotyped the Cistercian formula became.

The Lincoln Charters in the Bodleian Library have furnished three interesting examples, all issued to Robert Hussey between 1507 and 1532. In the former year Robert Hussey, described as 'Magister', is admitted to fraternity

¹ *Archaeologia*, lxxv, 19-60.

² To our Fellow Canon Foster I am obliged for pointing out that the Stixwold charters, which I quoted in my paper, and described as unpublished, have been printed in Prof. Stenton's *Danelaw Charters*, nos. 380 and 381.

in Belvoir Priory; and this discovery enables us to add one more name to the scanty number of English Benedictine houses of which letters of fraternity are extant. It is issued by Robert Prior of Belvoir and his convent in December 1507, and follows the usual Benedictine pattern, but as is natural in a late example is more prolix than those of earlier date in the list of 'good works', in which Robert Hussey is given a share. It affords also an additional proof that 'fraternity' and 'participation' amounted to the same thing; for it runs 'In fraternitatem nostri loci et prioratus vos recipimus in vita vestra pariter et in morte plenam participationem omnium bonorum . . . vobis plenariter concedendo pariter et largiendo'.

The second of the Hussey letters is especially interesting as furnishing the only example which has yet come to light of a fraternity letter issued by the one order of English origin, the Gilbertine Canons or Order of Sempringham; and the third, dated 1532, adds one more to the letters issued by the Prior of the Grande Chartreuse, and the 'diffinitores' of the Carthusian order.

The result of my further investigations, with the kindly help of my correspondents, has been to swell the number of Benedictine houses, of which Letters of Fraternity, so far as we know, have survived, from nine to ten, and the letters themselves from twenty to forty-four. We have further an interesting entry in the *Litterae Cantuarienses* (Rolls Ser., i, 10-12) where specimens are given of Letters of Fraternity from Christ Church, Canterbury, in three forms varying in length and in prolixity of diction. There is also in the same collection, p. 9, the model of a deed establishing mutual fraternity with another monastery; the house in question is Waltham Holy Cross, but the deed was evidently copied into the register as a pattern for agreements of this kind. Bury St. Edmunds gives us the formula of admission to fraternity in French (Harl. MS. 631, fo. 271) and, again, no doubt, to serve as a pattern, a letter in French from the earl of March and Ulster, asking that he may be admitted to the fraternity of the house, as divers of his ancestors had been. French is also the language of the letter by which Elizabeth de Burgh is admitted to fraternity at Ely in 1335 (B. M. Add. 41612). This is the only example I know of an actual letter of fraternity couched in that language, and may be an instance of consideration of the lady's probable ignorance of Latin.

Lists of those admitted to fraternity in divers Benedictine houses, but not the actual letters of admission, are given in the following:

St. Albans. Cotton MS. Nero. D. vii is a 'catalogus benefactorum et omnium eorum qui in plenam fraternitatem monasterii S. Albani usque ad an. 1463 recepti sunt: cum compendiosis historiis eorum et picturis'.

Bury St. Edmunds. The Curteys Register (B.M. Add. 14848) gives an

account of the reception of Henry VI, the duke of Gloucester, and others into fraternity in 1433. See *Archaeologia*, xv, 70, where a note gives the names of those admitted on 6th March 1440, being evidently the relations and retinue of Humphrey, earl of Buckingham; viz. Anne his wife; Humphrey and Henry his sons, Anne de Vere, his daughter; Henry Bouchier, count of Eu; John Bouchier his son; Isabella Verney; Elizabeth Drury; Elizabeth Culpeper; John Salvyn; Henry Drury; William Wistowe; Walter Percyvale: followed by a feast to the convent by the earl of Buckingham.

St. Benet Holme, Norfolk. 'Memorandum quod isti nobiles sequentes fuerunt recepti in fraternitatem monasterii S. Benedicti, ut examinavi per eorum registra'. *Simeonis et Willelmi de Worcestria Itineraria*, ed. Nasmith. A list of nineteen names, ranging in date from 1339 to 1366.

The *Martilogia* of other Benedictine houses also contain lists of those admitted to the fraternity of the monastery, e.g. Lambeth MS. 20 (= B.M. Arundel 68) for Christ Church, Canterbury, and for Belvoir priory, MS. O. g. 25 in the library of Trinity College, Cambridge (no. 1437 in M. R. James's Catalogue).

When we take a general view of the information thus afforded, together with such Benedictine letters as seem to have survived, we are led to conclude that, in conformity with the general spirit of Benedictine autonomy, there was no fixed model for a Letter of Fraternity in the order, though each house had one or more forms of its own, and the general outline of all followed the same main pattern. The abbot (or prior) and convent send greetings to the persons to be admitted, recite that though Christian charity bids us pray for all alike, yet there is a special obligation in the case of our friends and benefactors. Knowing therefore the devotion that they bear to the order and to the house of X., and wishing to repay this according to their power, the convent, acceding to the earnest request made to them, admit the petitioners to full participation in all masses, prayers, fasts, vigils, etc. (the list varies somewhat, becoming fuller in the later examples) performed by the house and its dependencies, and promise that on their death being reported in Chapter, they shall then be absolved, and all those things shall be done for them, which are customarily done for brethren or sisters departed. Sometimes, especially in the earlier examples, these services are specified; e.g. so many masses by each priest, so many recitations of the Psalter by each lay-person; and it is often provided that their names shall be recorded in the *martilogium* of the house, and sent round at the accustomed times for the prayers of associated houses. The formula varies in the different houses; some express the word 'fraternitas', others omit it; but even those that do not use the word in the letter of admission frequently employ it in their record of the transaction.

The *Liber Albus* of Worcester supplies us also with an interesting instance of a cathedral *confraternitas* designed for a special purpose, and of limited duration. In 1302, the prior John de Wyke, who had previously complained that the bishop, Godfrey Gifford, to whom the first fruits in the diocese had been granted for three years for the purpose of the repair of the cathedral church, had done nothing in the matter, and indeed used the money for other purposes, got his chance to set things right. In January of that year the bishop died and the prior found himself able to administer the diocese *sede vacante*. He was not slow to use his opportunity, and did so by reviving the *confraria*, which former bishops had employed for the purpose of raising funds. He accordingly exhorts all officials, archdeacons, deans, abbots, priors, rectors, vicars, chaplains, and all ecclesiastical persons, and the faithful generally, to receive with all friendliness the messengers (*nuntios*—the same as the *procuratores* or proctors) when they come to request the alms of the faithful in aid of the work of building of our church. He requests the parish clergy 'by their sermons, and by their example to induce their people to join the *confraria* and both to give and to bequeath for the good of their souls, some share of their wealth for this purpose. Whoever, after confession and true penitence thus charitably gives of his means is released from one-third of his penance, and receives from the pope, the archbishop, and bishops 1028 days of indulgence, and a share in all the prayers and benefits of the cathedral and of the whole diocese for ever. If the parish is under an interdict, on the day that the messengers are received the interdict is withdrawn. All whose names are inscribed in the *confraria* will be buried in consecrated ground *nisi aliud rationabile obsistat*. He orders them to receive the messengers with all reverence, and to admit no other collectors for any purpose, at least from Advent till after Easter, and to give these messengers the preference' (J. M. Wilson, *Liber Albus* of Worcester, p. liv).

A document of somewhat similar import is preserved among the muniments of Westminster Abbey, whereby the Abbot William (1214–22) grants to all who contribute to the construction of the new work there in honour of the Virgin Mother, participation in the spiritual benefits done (*que fient*) in the abbey and the monasteries which are in confraternity therewith, to wit: Malmesbury and its cells, Malvern and its cells, Hurley and the cell of St. Bartholomew in Sudbury: also participation in certain specified services, a relaxation of two hundred days of penance, twenty-one days' indulgence, and, by special arrangement with the abbot of Cîteaux, participation in the spiritual benefits of the Cistercian order.

I may here take the opportunity of correcting a mistake and a misreading of which I was guilty, with regard to the letter issued by the abbot of Abing-

don in 1476 (P. R. O. Chancery Misc. bdl. 15, file 6, no. 12). The name of the grantee is not Jane Jode, but Joan Darell, widow, of the diocese of Salisbury, and the letter is issued by the abbot as Papal Commissary in England, giving her leave to choose her own confessor, and certifying that inasmuch as she is a sister admitted of St. Thomas's Hospital, Rome, she is a sharer in the indulgences granted to that house. It is therefore not to be reckoned as an admission to fraternity at Abingdon Abbey, but should be grouped with admissions to St. Thomas's, Rome, since though it does not actually admit her to that fellowship, it states explicitly that she has been so admitted. I have therefore removed it from the category of Benedictine letters, and added it at the end of those belonging to St. Thomas's, which are thereby increased to nineteen.

Of the one Cluniac letter which has as yet come to light, one can only say that it follows in the main the general Benedictine outline. It is not indeed a fraternity letter pure and simple, for it specifies the particular benefaction made to Lenton Priory by the recipient, William de Verntun, in return for which he is admitted to their prayers; but it is obviously to be placed in the same category as the more formal admissions. It varies, however, from the genius of the Benedictine rule, in that it is issued, not by the particular house (Lenton, Notts.) which has received the benefaction, but by the abbot of Cluny, in conformity with the Cluniac principle of the subordination of all their foundations to the one mother-abbey of Cluny. We know that the abbot visited England in the year 1237, in which the document was issued; and we learn incidentally from the complementary certificate (if it may so be called) issued simultaneously by the prior of Lenton, that Abbot Hugh laid an injunction 'in pleno conventu' against any variation in the terms of the convent's obligation, thus showing that he was present in person. The documents are of sufficient interest, I think, to be given in full.

Belvoir Castle Muniments. Haddon 353.

Omnibus Christi fidelibus ad quos presens scriptum pervenerit Frater Hugo Cluniacensis ecclesie humilis minister et indignus eternam in domino salutem Cum nobilis vir Willelmus de Vernun pia ductus voluntate pro salute anime sue et Alicie uxoris sue et omnium antecessorum et successorum suorum totam terram quam habuit in Stanton Priori et conventui de Lenton cum corpore suo ibidem iuxta patrem suum sepeliendo, nos eundem W. et A. uxorem suam in participacionem omnium bonorum tocius ordinis cluniacensis Scilicet in ieiuniis diciplinis et vigiliis oracionibus missis matutinis et in omnibus aliis bonis que fiunt vel fieri possunt tam in capite quam in membris recepimus Prohibentes in virtute obediencie ne quis in posterum sive Prior seu conventus vel aliquis alius ballivus dictam terram dare vendere invadiare vel aliquo alio modo a dicta domo alienare presumat Retentis tamen dictis W. et A. viginti solidis quoad vixerint ad duas pitancias faciendas die videlicet sancti Nicholai decem solidis et

die sancti Marci evangeliste decem solidis. Quibus quidem diebus celebrabit conventus missas de sancto spiritu Et insuper una dimidia marca singulis annis retenta ad opus infirmorum de infirmaria Dictis vero W. et A. de medio sublatis diebus anniversariorum suorum fient eedem pitancie in perpetuam eorum memoriam, ut devocius et alacrius conventus officium exequatur Et ut hec donacio perpetuum robur obtineat presens scriptum sigilli nostri appositione duximus roborandum Actum anno gracie m^o ccc. xxx^o vij apud Lentonam

Portion of Seal. Abbot vested and standing . . . CLVNIAC . . .

Belvoir Castle Muniments. Haddon 354.

Omnibus Christi fidelibus ad quos presens scriptum pervenerit Frater R. Prior de Lenton et eiusdem loci conventus humilis eternam in domino salutem Noverit universitas vestra nos unanimi et pari voluntate ad petitionem domini Willelmi de Vernun et domine Alicie uxoris sue concessisse eisdem pro bonis que nobis antecessores sui et ipsi contulerint ut quicumque fuerit supprior istius domus recipiat singulis annis viginti solidos ad duas pitancias faciendas et dimidiam marcam ad infirmariam in perpetuum per manus illius qui terram de Stanton custodiet Quam terram dictus W. cum corpore suo nobis donavit Scilicet decem solidos die sancti Nicholai et decem solidos die sancti Marci evangeliste Quibus diebus duas missas de sancto spiritu pro eis et eorum liberis et amicis suis in conventu quoad vixerint celebrabimus Sublatis vero eis de medio diebus anniversariorum suorum celebrabimus missas in conventu pro animabus suis et animabus antecessorum et successorum suorum in perpetuum Et ut devocius et alacrius conventus hoc faciat, diebus anniversariorum suorum fient due pitancie de predictis viginti solidis Remanente semper dimidia marca ad opus infirmorum fratrum de infirmaria Ut autem hec mea concessio perpetuum robur obtineat huic scripto sigillum nostrum duximus apponendum Prohibuit insuper dominus Hugo Abbas cluniacensis in pleno conventu in virtute obediencie ne quis inposterum sive Prior vel aliquis alius ballivus hanc nostram concessionem mutare vel aliquo alio modo ad alios usus transferre presumat.

Seal gone.

In the Cistercian order the subordination of the daughter-houses was as thorough as among the Cluniacs; but it was not to the abbot of Cîteaux that obedience was due, but to the Chapter-general of the abbots of the whole order. The abbot of Cîteaux presided in virtue of his office, but in theory at least every member of the chapter was co-abbot, and the peer of Cîteaux or Clairvaux. We find this reflected in the Cistercian letters of fraternity which are issued by the abbot of Cîteaux and the whole assembly of the General Chapter, and by them alone; individual abbots do not grant them. The exceptions which I have recorded are more apparent than real, for the Pelham letter of 1450, by the prior of St. Anastasius, Rome, is an admission to membership in the brotherhood of Scala Celi in that monastery, not to fraternity with the whole body; and the Bitlesden document of 1379 is really a charter issued by the Corbets, father and son, since it bears their seal, and runs in their

name, conferring on the abbey certain lands, in return for which gift they are to be admitted to the prayers, etc., of the house; while the document of 1183-4 among Lord de L'Isle's MSS. runs in the name of the abbots of the two leading houses, Cîteaux and Clairvaux, though it deals with benefactions to the house of Robertsbridge. It seems thus to indicate an early form of the later practice, embodying the principle of acting only in the name of the whole body, but not yet crystallized into the stereotyped form of the abbot of Cîteaux and Chapter-general. When once established, however, this was so rigidly adhered to that the formula of the grant of participation among the Cistercians varied by hardly a word for three hundred years.

It will be noticed that it was the Cistercian practice that requests for participation, whether by individuals, or religious houses, should be brought forward in chapter by one of the abbots attending. When we turn to the consideration of the Carthusian examples we find the same feature in the four letters which are issued by the prior of the Grande Chartreuse. As I did not give a specimen of a Carthusian letter in my earlier paper, I here subjoin a transcript of the earliest, that issued in 1437 to Henry Kerspe [? Kershope] and Margaret his wife. Though issued so late, the names of the recipients have not been inserted later, as is so often the case; and I believe the same thing to hold good of the letters of 1493 to Thomas Pilborough and others, and of 1532 to Robert Hussey.

Brit. Mus. Add. Ch. 39,025.

Frater guill' humilis prior cartusie ceterique diffinitores capituli generalis ordinis cartusiensis dilectis nobis in Christo henrico de Kerspe et margarete uxori eius parentibus quoque et liberis eorum salutem in domino [sempiternam et oracionu]m suffragium salutare. Cum nemo sine crimine vivit nec sit homo qui semper faciat bonum aut non peccet, cuilibet desideranti anime sue salutem semper querendum est remedium quociens . . . vel emundetur vel protegatur. Propter quod pie devocionis vestre affectum quem vos habere [ad ordinem nostrum in]tendentes amore dei et ad supplices preces humilemque instanciam dilecti fratris nostri . . . de kerspe, concedimus vobis tenore presencium tocius ordinis nostri participacionem, vosque . . . amus tam in vita quam in morte omnium bonorum spiritualium que dominus in ordine [nostro . . . fieri . . . con]cesserit. Videlicet missarum oracionum psalmorum vigiliarum ieiuniorum clemosinarum ce[terorumque bonorum] exerciciorum quatenus auxiliante deo eo magis bonitas vestra piaque devocio . . . melius quo largius atque copiosius divina gracia super eos choruscaverit. Hoc [eciam addentes] de gracia speciali ut cum obitus cuiuslibet vestrum quem deus felicem faciat [fuerit in nostro pro]vinciali capitulo denunciatus, pro animarum vestrarum remedio missas et oraciones per totum [ordinem nostrum] celebrandas instituemus, prout pro amicis et participibus nostris fieri est consuetum . . . appositione sigilli domus cartusie Anno domini m^o cccc^o xxxvij^o sedente capitulo.

Seal gone.

The general scheme of the Carthusian fraternity letter, it will be observed, is very similar to the Benedictine ; but it is noteworthy that they are issued by the prior of the Grande Chartreuse, and the *diffinitores* of the General Chapter. The association of these *diffinitores*, or Standing Committee of the General Chapter, seems to be the Carthusian equivalent of the association of the whole body of abbots with the abbot of Cîteaux among the Cistercians. It is, with one exception, the only case in which the *diffinitores* are mentioned in connexion with these grants, though they existed, of course, in all the orders. The solitary exception is the Austin Friars' letter of 1279 to Sir Brian de Brompton, which will be dealt with in its place. For the rest, the Carthusian letters seem to follow more or less closely the Benedictine type ; i.e. after the salutation comes the statement that though the universal law of charity bids us pray for all men, yet we are specially bound to do so for our benefactors and friends : therefore knowing the devotion which A. B. bears to our Order, we admit him, etc. The Cistercians, as the Lacock and other letters show, omit this preamble, and go straight from the salutation to the recognition of the affection that A. B. bears to the whole Order.

The letters issued by the Austin Canons present fewer features of special interest than the monastic examples we have been last considering, and the few additional examples which have been brought to my notice do not seem to modify the general impression made by those already published ; there is, however, an example, issued in 1506 by the Provincial Chapter of the Austin Canons of England, which stands as parallel to the Benedictine letter of 1298. The Austin Canons seem to have had a general scheme in their letters of even less fixity than the Benedictine pattern ; but as we have only seven examples to reason from it is obviously impossible to speak with any confidence on the point.

The Premonstratensian or White Canons were much influenced in many respects by the Cistercian movement, and we find this influence reflected to some extent in their practice with regard to the issue of letters of participation or of fraternity. Like the Cistercian examples, the three letters I mentioned in my earlier paper run in the name of the abbot of Prémontré, and the General Chapter ; but, unlike them, they differ widely from one another in their phraseology.

As, however, they are all addressed to personages of importance, the king of England, the bishop of Worcester, and Dame Hawyse Neville, who had done great things for the house at Maldon, Essex, it is natural to suppose that they were specially composed for each recipient ; and we cannot therefore argue from them as to the Premonstratensian practice in the case of less important persons. There remain for consideration the letter issued by Amblardus the

abbot of Newhouse, the earliest foundation of the order in England, to Peter de Gousa in 1185, and the participation given by the house of Titchfield to R. St. John in 1258. Though these are in a sense to be reckoned as letters of fraternity, inasmuch as they announce to the world in general, or to the recipients of the letters, that they have been received into the fraternity of the house, yet they are not to be taken as representing the norm of a Premonstratensian letter. The Titchfield example confers the privilege in return for the advowson of Corhampton, and that from Newhouse, after certifying the fact of Gousa's admission, goes on to say that the writer would have given his messenger a more explicit answer concerning the things that he had written about, but since he was going on farther, and the abbot did not wish the whole countryside to know, he had not done so.

Frater Amblardus sancti Martialis servus indignus omnisque loci ipsius conventus karissimo fratri nostro domino Petro de Gousa salutem et fideles oraciones Suscepta legacione vestra et perlecta descriptioe letificati omnipotenti deo gracias agimus qui dilectum suum beatissimum Marcialem per miracula apud vos clarificare fidem vestram ac vicinorum per eadem confirmare dignatur. Dominum quoque R. fratrem vestrum qui beati Marcialis aecclesiam primus construxit, in conventu sicut fratrem nostrum absoluimus, et pro eius anima debitas deo oraciones, psalmos et missas obtulimus Vos quoque quem olim in aecclesia nostra beneficio suscepimus, amodo non beneficii tantum participem, sed sicut unum ex nobis tam in vita quam in morte fatemur. Omnis etiam qui aecclesie vestre vel servierint vel benefecerint, tocius aecclesie nostre beneficii socios esse concedimus. Preterea, de eo quod ad beati Marcialis et aecclesie ipsius claritutinem postulastis, pro cetero ad presens satisfecissemus nisi vester nuncius longius esset profecturus. Quod enim directuri eramus vel cum locus fuerit dirigemus, nec tractari indecenter nec portari per provincias oportebat (Brit. Mus. MS. Harl. 43. B. 14).

The occurrence of a Gilbertine Letter of Fraternity has been already alluded to; and it is satisfactory to know that the one order of purely English origin is at last represented in the list, although only by a late example. It is issued to Robert Hussey on 17th April, 1512, by Thomas, chief prior or master of the Order of Sempringham, and gives in considerable detail the services to be used on the announcement of the death of Robert or his wife Anne, and on their 'anniversaries'; and has this additional interest, that it bears a note at the end, added in a later hand, that Anne, wife of Robert Husye, Esquire, died on the fourth of the Nones of September. This is evidently an 'endorsement', if one may call it so, added, perhaps at the General Chapter, when Anne Hussey's death was reported. The letter would be returned to Robert, and preserved by him; and if his death had occurred before the dissolution of the order it would have been once more presented at the chapter, and afterwards kept at Sempringham, or destroyed, as being no longer needed.¹

¹ In the case of the letter issued by Durham to John Partington (*Durham Obituary Rolls*, Surtees

The letters issued by the orders of friars have increased from seventy-seven to just over one hundred, the largest increase being among the Trinitarians. The Dominican examples furnish little fresh material; a letter of 1444 from Bartholomew, the master of the order, is couched in the language of extravagant compliment, and neither it, nor the examples previously recorded, one addressed to King Henry III, and two to monastic houses, can be taken as giving the normal form in which the letters from the master were cast, if indeed any definite form existed. We are on surer ground with the provincial letters of the order, of which that to Henry Langley and Katherine his wife, reproduced on plate VII of my paper, may be taken as a typical example. Here the bulk of the letter is written out beforehand, and the names of the recipients inserted later. The word 'fraternitas' is not used, but 'participationem concedo', though in this particular instance the word has been blundered by the scribe, and corrected later. The participation is in all the masses, prayers, preachings, fastings, abstinences, watchings, labours, and other good works which the Lord shall grant to be done ('que . . . dominus fieri dederit') by the brethren of the order throughout the province of England. Further it is ordered that on the announcement of their deaths in the provincial chapter their souls shall be commended to the prayers of the whole province, and those masses and prayers shall be enjoined for them which are customary for brethren departed ('pro fratribus nostris defunctis').

The letters issued by the local priors of the Dominican convents have received one addition of some little importance, in the shape of the admission of John Kendale and Elizabeth his wife to the prayers of the Black Friars of Ilchester, by Stephen Assche the prior in 1485, now preserved among the municipal records of Bridgwater. The opening part of the letter is exactly the same as that of, e. g., the letter of 1484 from Robert Elsmere, prior of Shrewsbury to Thomas Wittecombe and Elizabeth his wife, but it then goes on: 'Insuper . . .', and details the indulgence granted by Innocent VIII (1484-92) giving permission to the *confratres* and *consorores* of the order to choose a confessor, who shall be able to give them once in their lives absolution, even in those cases which were properly 'reserved' for the decision of the Holy See (with certain exceptions) and the same at the hour of death. For this they are to fast every Friday ('singulis sextis feriis') for the space of a year following the publication of

Society, xxxi, 110) it is noted that it has been surrendered to the house that granted it, upon the death of the recipient. It is possible that in the case of a very poor or thrifty-minded house, the letter might be re-issued to a fresh person; and this may be the explanation of the curious fact that the letter issued in 1517 by Muchelney, Somerset, to Sir John Theke and his wife Elizabeth, was afterwards adapted to serve for 'dominus [? Johannes] Popylwyke' (Somerset Record Society, xlii, 62) and the names of John Spenlove and Mary met in the 1481 letter from the Shrewsbury Austin Friars, now in the Shrewsbury Museum, have been altered to that of 'Hew Lety'.

the indulgence. The letter then declares the Kendales to be sharers in this indulgence, and ends without the usual clause providing for the notification of their deaths. The letter might therefore be considered only as declaratory of the share of the Kendales, already admitted to fraternity in the order, in the fresh privileges given by the indulgence: but the precedent grant of participation precludes this supposition, and we must look upon the absence of the notification clause as exceptional and perhaps fortuitous.

The Franciscans remain, as they were before, the order of which the largest number of fraternity-letters remain, owing in great measure to the nine examples (now increased to fourteen) of the year 1479, which are couched in practically identical terms, and purport to be issued by the *gardiani* of local convents, in consequence of the permission granted by Sixtus IV that the brethren and sisters of the order, and the *confratres* and *consorores*, should have power to choose a confessor who might absolve them once in the year following the publication of his papal letters, and once at the moment of death. This was evidently a special form of letter, composed for this occasion only, and it is more epistolary in form than is usually the case, e.g. it begins: 'In Christo sibi karissimo (is) . . .' and ends: 'Vale(te) in Christo Iesu et ora(te) pro me'. It is also more explicit than is usually the case in letters issued by monks or friars, in admitting the recipients to *fraternity*, 'te in confratrem (vos in confratrem et consororem) et ad universa et singula fratrum administracionis anglicane suffragia recipio', thus varying from the usual practice, by which the general admits to the prayers of the order, the provincial to those of the province, and the local head of a convent to those of that house only.

We may further note that in the letters issued by the Friars Minors of the Holy Land, of which Dr. Little has furnished me with a fresh example, the same express mention of 'fraternity' is made.

'te una cum tua consorte tuisque liberis natis et nascituris ('te una cum tuis parentibus' in the form for priests) ad et in nostram [sanctam] fraternitatem ac ad universa et singula suffragia fratrum in terra sancta habitancium . . . recipio in vita pariter et in morte plenam vobis missarum . . . omniumque bonorum que per fratres dicte terre sancte operari dignabitur clemencia salvatoris participacionem tribuendo.'¹

The letters, too, which are issued by the Cismontane Observants, whether by the Vicar-General (Angelus de Clauasio to Luca dei Ugolini in 1475) or by his deputy in England (Francis Faber to prior and convent of Durham in 1533) expressly admit to confraternity, not mere participation; 'vos omnes pre-

¹ The Rev. E. R. O. Bridgeman's transcript of the letter to Laurence Roche, priest, has a clause, evidently misplaced by the original scribe or by the copyist, referring to the plenary character of the indulgences in which he is given a share.

nominatos ad confraternitatem nostram et universa et singula nostre religionis suffragia in vita recipio pariter et in morte'. Francis Faber (? Smith), who was Provincial of the English Observants,¹ as well as commissary of the Vicar-General, admits in a slightly varying form :

'ex speciali gratia prefati reverendi patris commissarii non solum ad specialem confraternitatem spiritualium bonorum nostre provincie anglicane verum etiam ad generalem totius nostre familie observantie cismontane vos et parentes vestros vivos et defunctos recipio in vita pariter et in morte plenam vobis et eisdem participationem omnium . . . bonorum spiritualium tenore presentium liberaliter conferendo que per fratres nostros, sorores sancte Clare, sorores beate Marie annunciate ac de conceptione, necnon per fratres et sorores tertii ordinis . . . in partibus cismontanis operari dignabitur clementia salvatoris.'

If these exceptional varieties are removed from consideration for the present, we have a *residuum* of some nineteen Franciscan letters which may be taken to represent the ordinary form of issue, and it is found to be, as in the case of the other orders, a grant of participation without specific mention of 'fraternitas'. It is, however, cast in more epistolary form, and concludes with some such phrase as 'Valete feliciter in domino nostro Iesu Christo matreque eius virgine gloriosa'.

To the four examples of letters issued by the Franciscan Minister-General or his deputy I am now inclined to add the mutilated letter to Beatrice Ros (Bodl. MS. Rawl. C. 72), and to associate its issue with those of 1407 and 1412 by Antonio da Pareto. Though at this latter date there was a rival General, countenanced by the Antipope, these letters are evidence that his authority was not recognized in England.

For an example of a Franciscan provincial letter of fraternity we may take that of 1475 to the Fellows of Pembroke College, Cambridge, reproduced on pl. vi of *Archaeologia*, vol. lxxv.

Of the local Franciscan letter, the following example from Bridgwater, which is the earliest I have come across, may serve as a specimen. It will be noted that the *gardianus* admits William Dyst and his wife Joan to fellowship by the authority of the provincial minister and chapter, an unusual feature.

Bridgwater Borough Records, no. 110.

In Christo sibi karissimis Willelmo Dyst et Johanne consorti sue frater Willelmus fratrum minorum Bruggewalteri Gardianus salutem [et] per presentis vite merita gaudia percipere sempiterna. Deuocionem vestram quam ob dei reverenciam ad ordinem nostrum habetis et specialiter ad conventum nostrum multiplici beneficiorum exhibicione demonstratam spiritualibus beneficiis compensari desiderans Auctoritate patris nostri Ministri totiusque capituli provincialis et de assensu unanimi supradicti conventus nostri

¹ The Observants, the Sisters of St. Clare, and the Third Order *in partibus cismontanis*.

vos ad universa et singula fratrum conventus memorati suffragia recipio tenore presencium in vita pariter et in morte. Plenam vobis participacionem bonorum omnium concedendo que per eosdem fratres operari dignabitur clemencia saluatoris Adiciens insuper de gracia speciali ut cum obitus vestri [nostro innotuerint capitulo idem pro vobis fiat quod pro fratribus nostris] defunctis recommendatis ibidem fieri consueuerit.

Valete feliciter in domino Iesu Christo Matreque eius virgine gloriosa.

'Datum Brugg' in nostro locali capitulo x^o. die Mensis Ianuarii Anno domini Millesimo cccc^o. nono.

For the Austin Friars there is but little new evidence, the only additional specimen being a provincial letter (printed) issued in 1526 by William Aller, provincial prior, to the members of St. John's Gild in Wakering Church, Essex. I have found two copies of this, one in the Society's collection of broadsides, vol. i, no. 2 B, the other in the British Museum (Dept. Printed Books, c. 18, e. 2. (16)). It might be questioned whether this ought not to be reckoned as a gild-letter rather than a friars', since the benefits of participation in the prayers of the friars are in this instance to be obtained through membership of the gild, and it would be the proctors of the gild, not those of the order, that would carry the letters round for sale; but in strict form it is an admission to the prayers and privileges of the order of Austin Friars in England 'vos ad universa et singula nostre religionis in vita pariter et in morte recipimus suffragia plenam vobis tenore presencium participacionem omnium bonorum concedendo que per fratres dicti ordinis per provinciam Anglie diffusos operari dignabitur clemencia saluatoris'. Here we may notice, as commonly in Austin Friars' letters, the phrase 'clementia saluatoris' with which we are already familiar from the Franciscan examples. The phrase, however, which is specially characteristic of the Austin Friars is the salutation which begins their letters: 'Frater N. prior provincialis (or *localis*) . . . dilectis sibi in Christo M. et N. oraciones et quicquid hauriri valeat dulcius de latere crucifixi.' This formula recurs steadily in every Austin Friars' letter which I have been able to examine personally, with the one exception of the printed letter of 1526 to the gild at Wakering; and this, as I have indicated, is not quite a normal example.

Opportunity may be taken here to modify an opinion which I expressed at the time of the reading of my paper, with regard to the letter issued by the *diffinitores* of the provincial chapter of the Austin Friars at Yarmouth in 1279, admitting Brian de Brompton to participation in the good works, etc., of the province. I then hazarded the conjecture that the *diffinitores* might have acted in this case during a vacancy in the office of the provincial prior; but the fact that there exists a seal of the English provincial chapter of the Augustinians, with four *diffinitores* (so named) represented on it, seems to show that in the

thirteenth century, at any rate, the authority of the provincial chapter was exercised through its *diffinitores*, not the provincial prior. The Carthusian examples, spoken of above, show that even the prior of the Grande Chartreuse did not act apart from the *diffinitores* of his chapter, and thus the 1279 letter may be evidence of an attempt to 'democratize' the order; but if so, by 1369, the date of the next provincial letter, the experiment had been abandoned, and the letters run like the rest in the name of the provincial prior.

The letters issued by the Carmelite order show an increase from five to ten, and we have at last an example granted by the general of the order (Bodl. MS. Top. Glouc. c. 5, p. 655, to prior, etc. of Lanthony). There are five provincial and four 'local' letters, most of which appear to owe their preservation to the fact that they have been used as fly-leaves in binding. They are consequently more or less injured by cropping; but what remains is quite enough to show that they conform rigidly to a common pattern, and are all grants of participation, 'fraternitas' not being mentioned. They open thus: 'Frater N. fratrum ordinis beate Marie genetricis dei de monte Carmeli in provincia Anglie commorantium prior provincialis' (for a provincial letter: the local formula is 'in conventu N. prior localis'). The devotion of the recipient to the order is described as being 'ob Christi reverenciam et gloriose virginis Marie matris eius cuius titulo ordo noster specialiter insignitur' instead of 'ob dei reverenciam' of the other orders. The rest of the letter follows the usual friar's model, using the phrase 'operari dignabitur clemencia salvatoris', except that the provincial letters are described as being sealed with the 'sigillum nostri provincialatus officii', the local letters with the seal 'mei prioratus officii', an expression which I have not met with in the others.

If we now take a general view of the letters issued by the four orders of friars, disregarding for the reason given above the exceptional Franciscan issues, and leaving the Trinitarians for future consideration, we get the figures following:

<i>Issued by</i>	<i>Dominicans.</i>	<i>Franciscans.</i>	<i>Augustinians.</i>	<i>Carmelites.</i>	<i>Total.</i>
General	4	5	1	1	11
Provincial	8	9	13	5	35
Local	7	6	3	4	20
	19	20	17	10	66

It is not unreasonable to suppose that the proportion among those that survive of general, provincial, and local letters corresponds roughly to the proportionate number among those issued; and to gather that in each of the four great orders the provincial letter was the most widely circulated, and regarded as the typical letter of fraternity.

The Trinitarians present an altogether different system of issue, as they

also present many points of difference from the four great orders. They are usually reckoned with the Friars, but there were many points, such as the holding of landed property, benefices, etc., on which they differed fundamentally from the ideals of Dominic and Francis. Pending a more accurate investigation of their precise status, I have continued to reckon them with the friars in this paper; but we must note that there are no general letters of this order, and no provincial; all are issued by the 'minister' of individual houses, and the extant letters bear a far higher proportion to the number of issuing houses, indeed to the whole number of houses in England than is the case with any other monastic order. Their number has increased from fourteen to twenty-seven, but there is not much fresh light thrown thereby on the status of the order. The opening formula runs with unvarying regularity: 'Frater N. minister domus sancti N. de N. ordinis sancte Trinitatis et redempcionis captivorum qui sunt incarcerati pro fide Iesu Christi a paganis . . . dilecto (or *dilectis*) A. B.,' etc. Then follows a recital of the privileges granted by successive popes to the members and combrethren of the order, a list which increases in length from a mere general mention in 1438 (Walknoll, Newcastle-on-Tyne, to Robert and Anne Claxton) to the specification of letters apostolic from Julius II, Clement V, Alexander VI, Innocent III, Gregory IX, Pius II, and Innocent VIII in that issued in 1508 by the minister of Hounslow to Henry Prince of Wales. The document usually ends with the formula of admission 'vos in confratrem et consororem nostri ordinis tenore presencium auctoritate nobis indulta admittimus' or 'per presentes in nostram sanctam fraternitatem vos devote recipimus'. In some cases this formula is not employed, but a statement that the recipient is entitled to share in such-and-such an indulgence. This we may take as evidence that the person addressed has already been admitted to fraternity, and is consequently included in the scope of an indulgence subsequently obtained; and though these are not technically letters of admission to fraternity, it is clear that they are very closely connected with them.

It will be observed that the admission is to 'fraternity', not merely to participation; and in this and in the recital of the benefits accruing to the combrethren there is a marked resemblance between these Trinitarian letters and the Franciscan issue of 1479. We may say, indeed, that the Franciscan letters constitute an approximation to the Trinitarian form, and that this, in turn, is a sort of half-way house between the normal Friars' letters and those issued by hospitals and gilds, which we shall next consider. The title of 'Hospital' was in fact occasionally given to some houses of this order, such as Thelisford in Warwickshire, which is consistently styled 'Hospital' whenever it is mentioned in the Hereford Registers.

To the kindness of our Fellow Dr. Craster I owe the knowledge of a printed letter of fraternity from the Crutched Friars of London, dated 1528, among the broadsides of the Bodleian Library. This is the only instance of a letter issued by these friars that I have any notice of. There are two copies in the collection, both of them imperfect, and in their general character they approximate more closely to the gild and hospital type than to the normal Friars' letter.

Before we pass to the consideration of the letters of hospitals and gilds, I should like to say a word on those issued by Secular Clerks, whether in colleges at the Universities or elsewhere. I have found no fresh letters from colleges, though one may feel reasonably certain that a good many were granted to persons with whom the college wished to stand well; and some of these we hope may yet come to light. I owe to the kindness of the dean of Lichfield notice of the admission of certain notables to the fraternity of the chapter there; and in all probability a search in the records of the cathedrals of the old foundation would reveal the same elsewhere, showing that they too granted their fellowship to important people, very much after the fashion of a big Benedictine house.

We may, in fact, compare the admission of a distinguished visitor to fraternity in a great Benedictine monastery or a cathedral chapter to the modern practice of conferring the honorary freedom of a borough upon a notable benefactor or a distinguished public character.

We come now to the letters issued by hospitals proper and by gilds; and it is in this section that the additional examples I have found are those which shed the most light on the methods used by those who exploited the letter of confraternity frankly as a means of raising money. The number of examples has risen from thirty-four to seventy-eight. The fourteen examples from Burton Lazars Hospital, Leicestershire, are now fifteen, by the addition of a late (printed) letter in the Department of Printed Books in the British Museum; and the Walsoken letters have risen from six to ten, and likewise conclude with a printed example, also in the British Museum. The date has been cut off, but it is granted by John Whetham, master or warden, who evidently bore office later than Thomas Honyter, who issued the letter of 1505 to John Willoughby, and earlier than Ralph Stanmow, who surrendered the hospital in 1545.

The thirteen letters of St. Thomas's Hospital, Rome, are increased to nineteen, and we must add the letter, very closely allied to the fraternity proper, from the abbot of Abingdon, as papal commissary, to Joan Darell in 1476, in which he notifies her that she shares, as a sister of the hospital, in the indulgences granted to it. The letters are all grants of fraternity, and recite at

greater or less length the privileges enjoyed through papal indulgences by the members of the brotherhood. A large proportion (one-third) of the fifteen date from the *triennium* 1459-61, in consequence of the grant made in 1458 by Pius II, that the members might choose a confessor on the usual terms, and with the usual powers, within the three years immediately following the publication of his letters apostolic.

Next after the letters of St. Thomas at Rome we may mention those issued by the hospital of the Holy Spirit 'de Saxia', in the same city. These two hospitals have sometimes been regarded as identical, with a supposed change of name at the end of the fourteenth century; but they were really quite distinct, and the examples of the letters of the hospital 'de Saxia', which are all very late (1519-20) and printed, show that the original name persisted till at least that date. Mr. Albert Way in his article in the *Archaeological Journal*, vol. xvii, states that the hospital 'de Saxia' was said by tradition to have been founded by King Ina of Wessex in 727, and augmented by Offa of Mercia in 794. It is described as 'Hospitale apud ecclesiam S. Mariae in Saxia in urbe Romana—quod Hospitale S. Spiritus communiter nuncupatur, et quod quidem Hospitale Anglorum dicitur, et Anglorum fuit hospicio deputatum'. In 1477 Sixtus IV confirmed numerous indulgences to this hospital under the name of 'Hospitale S. Spiritus in Saxia alme urbis'.

On the other hand, the hospital of the Holy Trinity and St. Thomas the Martyr, generally known as St. Thomas's, Rome, owes its origin to the distinguished soldier Sir Robert Knolles, who also founded the hospital called Knollesalmeshous, Pontefract, a letter of which figures in our list, of the date 1447. With his wife Constance he built and endowed one of the cells in the London Charterhouse (Hope, *History of the London Charterhouse*, p. 71). He joined with Sir John Hawkwood and Sir Guy Calveley in the foundation of an English hospital at Rome (*D.N.B.*, xxxi, 283) which is no doubt that of which so many letters survive. See B. M. Harl. MS. 2111, p. 99. He died in 1407.

An illustration of the widespread activity of the agents of such institutions as St. Thomas's Hospital in Rome is given by the existence of a number of matrices of the seals of that house. In the *Archaeological Journal*, vol. xvii, pp. 250 ff., Mr. Albert Way prints among other indulgences a letter of fraternity from the hospital, and records the existence of six matrices of its seal, apparently all different. One of these bears the legend: S. AD CAUSAS HOSPITALIS S. THOME MART. IN ROMA, and is probably unconnected with this side of the hospital's work; but the other legends run: 'S. fraternitatis hospitalis sci thome martiris in roma' in four cases, and in the fifth it is even more explicit: 'S. procurator' hospitalis sci thome martiris in roma'. We may therefore imagine these proctors, armed with a bundle of blank forms of fraternity and the seal of

the house, going each throughout his district, selling the forms when he could, collecting the annual subscriptions of the members, and any donations which he could secure. There are also a large number of variant seals of Burton Lazars hospital (seven in the Society's collection) testifying to a similar state of things there also, and the same may be said of Holy Trinity hospital, Walsoken, though the examples are not so numerous.

In the section of Hospitals (various) there are considerable additions, all of late date. When my paper was published, I knew only of two, St. Bartholomew's at Gloucester and 'Knollesalmeshous' at Pontefract. I am now able to include letters from St. Anthony's (of Vienne), St. Mary of Bethlehem, and St. Thomas Acon, all in the city of London, and all, except the first, printed letters of the sixteenth century. The most fruitful source of these late printed letters has been the department of printed books in the British Museum, but it is run close by the Bodleian Library, and there are others in the Public Record Office and in the Society's collection of broadsides.

Of letters issued by gilds, those of St. Mary-in-the-Sea, at Newton, near Ely, remain seven as before, but the Boston pardons have increased from seven to thirteen, including one example, the only one I have come across, which is written, not printed; I shall have occasion to refer to some of these new examples later. The only new gilds whose letters I have to chronicle are those of St. Margaret, Uxbridge, of which the Society possesses an example, dated 1527, and of the chapel of St. John Baptist at North Newington, in the parish of Broughton near Banbury, of which I found two examples both dated 1521, but not quite identical, in the Bodleian Library, A. iv. 43 (1). All these examples are printed. Possibly also one might more appropriately place here the Austin Friars' letter to the Gild of St. John, in Wakering church.

It is of course certain that the letters of fraternity which survive constitute only a very small proportion of those which were issued. Their value ceased after the death of the recipients, hence there was no reason for their preservation any longer; and it is often only through their use for other purposes, such as bookbinding, that they remain to us at all. It may also be taken as reasonably certain that some of the gilds or hospitals, as of the monasteries which issued fraternity letters, are unrepresented in our list; St. Mary Rouncival, for instance, issued many such letters, at the price of fourpence each, but none remains to us, so far as my knowledge goes. It is not without interest, therefore, to see if we can gain some idea as to what proportion of the issuing bodies, whether monks, friars, hospitals, or gilds, have letters still extant, and how many are wholly unrepresented.

To begin, we may take it as certain that every Benedictine house had power to issue such letters, and that, at any rate, most of the larger houses did

so; that the like liberty belonged to the houses of Austin Canons, though they seem to have availed themselves of it to a less extent; that the Reformed orders, Cluniacs, Cistercians, Carthusians, and Premonstratensians issued them chiefly, though not exclusively, through their central authority. It is also evident that the four great orders of friars issued principally indeed through the provincial, but that any friary might admit to participation in the prayers of that house. The Trinitarians, on the other hand, who are in proportion the most abundantly represented of all the orders in our list, issued by single houses only.

The real difficulty comes when we pass to hospitals and gilds. These were very numerous in England; did they all issue fraternity letters?

A partial answer to this question may be found by comparing the licences to collect the alms of the faithful issued to the proctors of these bodies by the bishop of each diocese, with the names of those of which letters are still extant, and I have selected for the purpose the registers of the last three bishops of Hereford before the Reformation, whose registers are extant, Mylling (1474-92), Mayew (1504-16), and Bothe (1516-35) since they are easy to consult in printed form¹ and cover a period when the issue of these letters was very active.

The result can of course only be approximate, since it is not always stated whether the proctors to whom licences are granted are selling fraternities, or simply collecting alms without offering anything in return; and it is evident that licences given to individuals to solicit the alms of the faithful for some purely local and temporary object, such as the repair of a church, or of a bridge, usually within the diocese, ought to be excluded from consideration, even when an indulgence is promised to those who contribute. Still, as one reads the list, it becomes pretty clear which were the bodies whose proctors, in all probability, offered letters of fraternity; and these were, during the period, twenty-three in number, as given in the following list, the licences being in most cases granted for a year only, and renewed again and again. Where this is so the number of grants is added after the name; and an asterisk is prefixed to those of whom one or more letters of fraternity are known to exist:

*Hospital of St. Thomas in Rome	31 grants in 49 years
*Hospital of St. Anthony of Vienne, London	25 " "
*Thelisford Hospital, Warwickshire ²	23 " "
*Burton Lazars Hospital, Leics.	17 " "
Jesus Gild in St. Paul's Crypt	12 " "
Rouncival Hospital, Charing Cross	10 " "

¹ Published by the Canterbury and York, and Cantilupe Societies.

² A house of Trinitarians, but consistently styled 'Hospital' in the Register.

*Hospital of St. Mary, Bedlam	10	grants in 49 years
Gild of St. Clement in St. Clement Danes	8	„ „
Hospital of St. Sepulchre, Lincoln	4	„ „
*Gild of B. V. Mary of Newton, dio. Ely	4	„ „
*Hospital of St. Thomas Acon, London	4	„ „

The following have two or less:

Fraternity of St. Cornelius in St. Margaret's Westminster; Austin Friars of Ludlow¹; Bonhommes of Ashridge; two each.

*Hospital S. Spiritus de Saxia, Rome; Gild of St. Christopher and St. George at York; Battlefield College, Shrewsbury; *St. Margaret's Chapel, Uxbridge; *Crutched Friars, London; Fraternity of Frome Vowchurch, dio. Sarum; St. Cross near Tower of London; Gild of B.V.M. and St. George, Southwark; Gild of St. John of Beverley; one each.

This is, of course, only a rough-and-ready method of inquiry, and not all the gilds and hospitals that we know to have issued letters of fraternity are represented in the list, the most obvious omissions being perhaps Walsoken Hospital, Norfolk, and the Gild of St. Mary at Boston; still, out of the twenty-three bodies whose proctors were working for a longer or shorter period in Hereford diocese, ten, or approximately 44 per cent., have letters still extant; moreover, of these ten seven are found among those which have four licences or more issued to them during the half-century under consideration. Other dioceses would no doubt show somewhat variant figures; a diocese in the East of England, for instance, would almost certainly have licences to Boston and Walsoken, and omit some of those found in Hereford; but the general conclusion would seem to be that the majority of those hospitals and gilds which were busiest in the issue of letters of fraternity are represented by specimens still extant. No doubt there are many more still to be discovered and recorded, which will help to fill some of the gaps: letters, for instance, of the hospital of St. Mary Rouncival, Charing Cross, or of the gild of the name of Jesus in the Crypt of St. Paul's Cathedral; but enough has been said to show that the number of gilds and hospitals actively engaged in the issue of these letters was not so very large after all. We may not unreasonably conjecture that some of the institutions which receive a licence from the bishop on one occasion only were making a special appeal for some particular object, and that they did not make it a constant practice to collect alms in this way year after year, as did for instance the hospital of the Holy Trinity and St. Thomas the Martyr in Rome, whose income must have come largely from this source.

One rather neat piece of cross-illustration may be noted in the licence

¹ As agents for the rebuilding of St. Peter's Rome.

granted by Bishop Bothe of Hereford on 15th April 1519 to Philip Mulert, doctor of decrees, vicar-general in England and Ireland of Alexander Neronibus, preceptor and master of the Holy Spirit in Saxia in Rome, and his proctors John More and William Thurlwyn, priests, to gather the alms of the faithful, for the support of the poor and other charitable purposes, when we bring it into connexion with the letters of fraternity printed in 1519 and 1520, of which I know of five (three of 1519), which were issued by Philip Mulert, commissary general for England and Ireland of the hospital Sancti Spiritus de Saxia, Rome. In the British Museum (Dept. Printed Books, c. 18, e. 1. 48) is an imperfect broadside, which sets forth the conditions and advantages of fraternity in the hospital.

These proctors were not exclusively engaged in selling fraternities of the hospitals and gilds which they represented; they also gathered the yearly contributions of those who had already been admitted as 'combrethren'. Several of the indulgences quoted in the letters lay down, as a condition on which their benefit is to be obtained, that they shall contribute a sum yearly to the funds of the gild or hospital. The sum is not specified, and probably varied according to the means and disposition of the *confrater*. In the case of the letter from St. Thomas's, Rome, to William Kyrmond and his wife Elizabeth, printed in the *Archaeological Journal*, xvii, p. 252, the words 'per annum j^d' are inserted in one corner; this we may take to be the annual contribution in this particular instance. On the other hand, the very high price (for so late a date) of 26s. 8d. for a Boston letter of 1521, of which 2s. was paid as an instalment, leads one to conjecture that in the case of Boston the payment of this sum secured life membership in the gild, and that there was no question here of an annual contribution; and this conjecture finds support from the note written at the foot of the Boston letter, preserved among Lord Middleton's deeds, which was issued to Thomas Willoughby in 1519: 'admissus per Willelmum Temper Camerarium et soluit vjs. viijd. et sic debet solvere annuatim quousque xxvjs. viijd. sunt plenarie persoluti, et sic esse quietum sine ulteriori solutione' (Hist. MSS. Comm. Report, 1911, p. 136).

The explanation of these sums appears to be given in a passage quoted from Fox's Acts and Monuments in Pishey Thompson's *Hist. and Antiquities of Boston* (1856), p. 137, which states that in the 'pardon' granted to the Boston gild by Popes Innocent VIII and Julius II it is laid down that 'every person, man or woman, entering into the same Gilde, at his first entering should give to the finding of seven priests, twelve ministers, and thirteen beadmen, and to the lights of the same brotherhood, and a grammar school, five shillings and eightpence, and for every yeare after, twelpepence'.

Now if we take twenty-one years' purchase (the usual calculation at the

period) of the annual subscription, we get 21s., which, added to the 5s. 8*d.* mentioned above, gives precisely the 26s. 8*d.* specified in the letters of Thomas Willoughby and Sir John Rodcliff; we may take this sum then as representing a life-composition on the part of the member admitted.

Whether it was the usual practice of hospitals to have a low price for their fraternities, combined with an annual subscription, and no composition fee, while gilds set their price of admission, in the shape of life composition, fairly high, and thereafter demanded no further contribution, there is not at present evidence enough to determine; we need to find yet more examples. Indeed it is not always easy to distinguish between gild and hospital; St. Mary Rouncival, for instance, is described by Westlake as a 'Gild Hospital'; but it is not without interest to observe that in the list of licences given above there are nine institutions described as hospitals and two gilds, among those which find most frequent mention (four licences and upwards), while among those which occur more rarely (once or twice only) there is one hospital and at least nine gilds, as though a hospital applied for a licence more often than a gild. For it is obvious that an institution which had to collect yearly contributions would need to send its agents more frequently than one which confined itself to enrolling new members, who would pay their contributions either in one sum or in three or four instalments.

I have put together here such evidence as I have been able to gather from notes on the letters themselves, as to the payments made by those admitted to confraternity.

I have found no evidence at all of any payment in the monastic letters. Confraternity is often given to the donor of a manor or advowson in consideration of the relinquishing of a claim against the house, or to a distinguished visitor, who no doubt was expected to make a handsome donation, but that is not quite the same as paying for the letter of admission. Nor is there anything forthcoming from the four great orders of friars; whatever may have been the real nature of the transaction, it is always stated that the admission to fraternity or 'participation' is in consideration of the devotion of the recipient to the order; but the Trinitarians as usual range themselves rather with the gilds and hospitals than with the friars proper. I mentioned in my earlier paper the note 'pro ordine iiij^d' on a Mottenden letter of 1487, which I was then inclined to regard merely as a fee for the bearer, but which I now think to be the purchase-price of membership. Another Trinitarian letter (P.R.O. Court of Wards, Deeds, 239/2) issued by Thelisford in 1494 is more explicit: 'ij^d annuatim Thomas Wood proctur' and that granted by Mottenden to J. Prese and others in 1477 mentions the like sum, 'per annum ijd.'

For Holy Trinity Hospital, Rome, we have the Pelham letter of 1476

with 'precium xij^d' and one to Sir Thomas Garway, chaplain, in 1497, on which is noted 'per Willelmum Barker yerly ijd.' W. Kyrmond's i^d per annum I have already mentioned. The price of admission to fraternity in the hospital of S. Spirito de Saxia, Rome, is given in the broadside mentioned above as 'xxx^d of Sylver of Turyn'. No annual subscription is named. The evidence of the Boston letters I have already spoken of; we may add to the examples given a letter dated 1522 which was included in Messrs. Sotheby's sale of 19th December last. This has a badly written note at the foot which I read with some hesitation as 'per me Robertum Tallboys camerarium' and then 'xx^d lett' iiij^d'. Without speaking with any certainty on the point, I think that this is another reference to a payment of two shillings on account, for the privilege of incorporation in the gild, of which fourpence is paid for the actual copy of the letter (compare the similar price of a letter of St. Mary Rouncival) and the balance makes up the first instalment of the full sum.

The cheapest fraternity which I have found is that of our Lady of Pity (de Mercede), an Italian institution, but circulating letters in England and printed in English, of which a specimen is in the Bodleian Library. In this the usual privileges could be obtained for a single payment of one penny, husband and wife being reckoned as one person!

But if the price of a fraternity letter in a hospital or gild was, as a rule, low, the number sold must have been prodigious, at any rate in the sixteenth century, when printed editions were issued. It is unfortunate that we have no letters surviving either of the hospital of our Lady of Rouncival, near Charing Cross, or of the Jesus Gild in the crypt of St. Paul's Cathedral, since some light is thrown by their accounts¹ on the income received from this source. Both institutions seem to have leased out, as Thelisford hospital also did, their right to gather alms to proctors who undertook the collection in different parts of England, and it may be presumed that their business was not only to gather alms, but to sell fraternities. The Jesus Gild in 1506 leased out 'all the devociions of England' to 'Maister Smyth Doctour of Phesyk' for £28 a year for seven years; but evidently the collection was worth far more than this, for in 1514-15, after the lease had fallen in, the income had swelled to £144 6s. 8d., in 1533-4 it was £385, and in the year following more than £406. This was practically all obtained through the proctors, and though it included general alms, it must have represented the sale of thousands of fraternity letters. The Rouncival hospital was on a more modest scale. The accounts of 1520-4 show an income of £10 15s. 2d. from 'quarterage', which seems to represent the subscriptions of the members, while the 'proctors' money' comes to £19 9s. 4d. There are also among the casual receipts small sums for the

¹ See Westlake, *Parish Gilds of Mediaeval England*, pp. 77-9, 96-100.

sale of 'letters of pardon', i.e. fraternity, at fourpence each; but these are hardly numerous enough to account by themselves for the printing of these letters by the hundred, as the accounts show them to have been. Probably these small sums represent direct sales only, and the bulk of the letters were normally sold by the proctors in addition to collecting alms pure and simple; and the money from this source was either paid over with the rest of the proctor's money, or went to swell the profit that he made.

By the courtesy of Miss R. Graham, I am enabled to incorporate here the following information from her forthcoming paper on the hospital of St. Anthony of Vienne, London:

'In 1441, John Carpenter (afterwards made Bishop of Worcester) revived a confraternity of the house of St. Anthony for men and women, lay, secular, and religious. The pope granted them the privilege of choosing their own confessors, who could commute vows of abstinence, and vows of pilgrimage, except the Holy Land, Rome, and St. James of Compostella, and absolve them when under sentence of excommunication. Under these circumstances it was very attractive to join the confraternity of St. Anthony's—and St. Anthony's profited accordingly. The matter might however be regarded from another point of view, which the Abbot of St. Augustine's, Canterbury, put before Pope Calixtus III. In his petition he told the pope that certain of his monks had made themselves members of the fraternity of St. Anthony in London, without his permission. They paid a yearly subscription to the hospital, and chose as their confessors, even secular priests, and so were no longer on an equality with the other monks, and refused to obey their Abbot. The pope obligingly ruled, that the privilege granted thirteen years before did not extend to monks.'

It is perhaps worth noticing, in this connexion, that in the only letter of St. Anthony's, London, that I have come across (MS. Bodl. 692. fo. 111 b, printed in *Correspondence of Bekynton*, Rolls Series, ii, 3578) fraternity is granted in 1442 by John Carpenter, as Master, to W.B.M. of Worcester. The most natural interpretation of the 'M' is that it stands for 'Monachus', and this raises the presumption that John Carpenter's efforts on behalf of his hospital may have caused trouble in other Benedictine houses also, and that he himself may have had experience of this when he came to Worcester as bishop; for the MS. volume in which this letter is transcribed draws emphatic attention in marginal notes to the fact that the privilege was only to last for five years, though it may be doubted whether the conclusion was correct.

To resume from Miss Graham's paper:

'The confraternity thus founded, or rather revived with special privileges, by Master John Carpenter, was extraordinarily successful in raising revenue for the hospital. Among the Chapter Archives at Windsor, to the Dean and Canons of which the Hospital was granted by Edward IV, there are several deeds issued to collectors in different dioceses by the last Master, Peter Courtenay. In 1476, all property, alms,

legacies, pigs, and other animals were leased to the collector for the diocese of Worcester, for £23. 13s. 4d. a year. A roll of the receipts of the hospital, not dated, but about this time, shows that collectors were working in every diocese in England and Wales, and the total net receipts were £549. 13s. 4d., a sum which represents over £6,000 at the present value of money.

These methods are a remarkable testimony to medieval organization, and they were continued until the Reformation, as is shown by the following letter, written in 1537 to Thomas Cromwell from Charles Wingfield at Kimbolton.

‘On Palm Sunday last, Harry Cleepulle brought letters under the king’s broad seal, to gather for the relief and sustentation of the house of St. Anthony in London. After declaration of the same to the people, he opened to them a cross, and certain hallowed bells, they thinking the king content therewith, on hands and knees offered to the said cross and bought of his bells to preserve their cattle. This makes the people scorn the sermons of the Vicar, so I have detained him here, and I send his letters, cross, and bells by bearer, awaiting further instructions.’

The analysis of the licences granted by the bishops of Hereford, which I mentioned before, reveals also the fact that not only did the same man act year after year as proctor for the same hospital or gild, but that the same man was frequently licensed to act for several such institutions at the same time; in fact, that there must have been professional proctors, just as nowadays the same man might act as agent for several insurance offices. It is also frankly recognized that the proctors come as a matter of business to sell their wares: since the usual phrase used in granting the licence is ‘*licenciam exponendi indulgencias suas*’, the same as would be used of exposing goods for sale in the market.¹ Such traffic in spiritual privileges must of course seem a very improper thing; but it should be remembered that after all the effect of most of the indulgences conveyed by letters of fraternity was not very far-reaching, being commonly such privileges as the right to choose one’s own confessor, who could give plenary absolution once in the grantee’s lifetime, sometimes once within a given year, and again at the hour of death. Even then, the crimes, or some of them, normally ‘reserved’ for reference to the Holy See, are usually excepted. The right to claim Christian burial is also sometimes conceded (as among the Trinitarians) unless the confrater has been ‘*nominaliter excommunicatus*’, excommunicated by name, not merely involved in a general excommunication. This privilege would also ensure them Christian burial in a time of interdict. But I have not found, even in the later instances, any general tendency to multiply long series of years, for which the pains of purgatory are remitted, such as most of us associate with the name of ‘indulgence’. The most conspicuous instance of a promise of a long series of years which

¹ It might be rendered ‘expound’, but such exposition was always with a view to sale.

I have met with, is to be found in the letter which I have doubtfully ascribed to the Franciscans, wherein Richard Erle, in being made a 'confrater' of the Holy Sepulchre, receives a remission in all of eight thousand years and as many Lents besides thirty thousand masses and the same number of psalters (*Archaeological Journal*, xvii, 255). This is indeed an exception to the general tenor of the indulgences quoted in letters of fraternity; but it must be confessed that as time goes on the indulgence part of the letter tends to become more and more prominent, to the obscuration of the participation in the prayers and good works of the fellowship or order, which is the leading feature in the earlier examples, just as this is in turn something more systematized, more stereotyped than the spontaneous affection of the letters of the earliest stage of all. And this obscuration, or development, whichever we may prefer to call it, is marked by the use of the name 'pardon' which originally applied only to indulgence-bearing letters, but came to be applied to them all, so that a testator could direct that the pardon which I have from the Black or Grey Friars of X shall be taken there, although we can be reasonably certain that the document made no reference to indulgences, but admitted only to participation in the good deeds of the community and a solemn commendation, and masses after death.

The issue of all letters of fraternity would, of course, cease, at any rate with the accession of Edward VI, but it is of interest to note that Queen Mary renewed the Letters Patent for the sale of indulgences to St. Anthony's Hospital in September 1554 and must have done the same to Boston, as one of their pardons is dated 1555.

One may perhaps conclude this paper by quoting two descriptions of the system of fraternities roughly contemporaneous, in the latter part of the sixteenth century, but dealing with different aspects thereof: the one with the system as it remained in a great Benedictine house with a great deal of the original feeling and purpose yet surviving.

We will let the author of the *Rites of Durham* speak for himself:

'There did lye on the high altar an excellent fine booke verye richly covered with gold and siluer conteing the names of all the benefactors towards St. Cuthberts church from the first originall foundation thereof, the verye letters for the most part beinge all gilded as is apparent in the said booke till this day the laying that booke on the high altar did show how highly they esteemed their founders and benefactors, and the dayly and quotidian remembrance they had of them in the time of masse and diuine seruice did argue not onely their gratitude, but also a most diuine and charitable affection to the soules of theire benefactors as well dead as liuinge, which booke is as yett extant declaring the s^d use in the inscription thereof.'

This was, of course, the famous *Liber Vitae*, now in the British Museum

(Domitian VII) which corresponded as it seems to the *Liber fraternitatum* in other Benedictine houses, such as Cott. Nero D. vii, for St. Albans, and Arundel 68 and Lambeth MS. 20 for Christ Church, Canterbury. It was the entering of the name in the book such as this which seems to be implied in the promise of inscription in the *martilogium* of the house, found so frequently in Benedictine letters of fraternity, and, so far as my information goes, in them alone.

The other quotation deals with the system of fraternities as it was exploited (it is difficult to use any other word) for the purpose of raising funds for the gild of St. Mary, in the church of St. Botolph at Boston. If the monk of Durham saw everything through the softening mist of a tender regret, John Foxe contemplated the system of pardons through Genevan spectacles, and this is what he says; we need not, however, take every detail as strictly accurate: he was probably only repeating with relish the ale-house gossip of his native town.

Pishey Thompson's *History and Antiquities of Boston* (1856), p. 136 f.

From Fox's *Acts and Monuments* (vol. ii, p. 498, ed. 1641).

'It happened the same time that the towne of Boston thought good to send up to Rome for renewing of their two pardons, one called the great pardon, and the other the lesser pardon. Which thing, although it should stand them in great expenses of money (for the Pope's merchandise is always deare ware) yet notwithstanding such sweetnesse they had felt thereof, and such gain to come to their towne by that Romish merchandize (as all superstition is commonly gainfull) that they like good catholique merchants, and the Pope's good customers, thought to spare for no cost to have their leave again of pardons renewed, whatsoever they paid for the fine; and yet was all this good religion then, such was the lamentable blindnesse of that time!

'This then being so determined and decreed among my countrimen of Boston, to have their pardons sued, repaired, and renewed from Rome, one Geffrey Chambers, with another champion, were sent for the messengers with writings and money, no small quantity, well furnished, and with all other things appointed, necessary for so chargeable and costly an exploit; who coming to Antwerp, and misdoubting to be too weak for the compassing of such a weighty peice of worke, conferred and persuaded with Thomas Cromwell to associate him in that legacy, and to assist him in the contriving thereof. Cromwell, although perceiving the enterprize to be of no small difficulty to traverse the Pope's court, for the unreasonable expences of those greedy cormorants, yet having some skill in the Italian tongue, and as yet not grounded in the judgment of religion in those his youthful daies, was at length obtained, and content to give the adventure, and so took his journey towards Rome.

'Cromwell, loth to spend much time, and more loth to spend his money, and again perceiving that the Pope's greedy humour must needs be served with some present or other (for without rewards there is no doing at Rome) began to cast with himself what thing best to devise, wherein he might best serve the Pope's devotion. At length,

having knowledge that the Pope's holy tooth greatly delighted in new fangled strange delicates, and dainty dishes, it came into his minde to prepare certain fine dishes of gelly after the best fashion, made after our country manner here in England, which to them of Rome was not known or seen before. This done, Cromwell observing his time accordingly, as the Pope was newly come from hunting into his pavilion, he, with his companions, approached with his English presents, brought in with a three man's song (as we call it) in the English tongue, and all after the English fashion. The Pope, suddenly marvelling at the strangeness of the song, and understanding that they were Englishmen, and that they came not emptie-handed, willed them to be called in. Cromwell there shewing his obedience, and offering his gelly junkets, such as kings and princes only said he, in the realme of England vie to feed upon, desired the same to be accepted in benevolent part, which he and his companions, as poor suiters unto his Holinesse, had there brought and presented as novelties meet for his recreation, etc. Pope Iulius, seeing the strangenesse of the dishes, commanded by and by his Cardinall to take the assay, who, in tasting thereof, liked it so well, and so likewise the Pope after him, that knowing of them what their sutes were, and requiring of them to make knowne the making of that meat, he incontinent, without any more adoe, stamped both their pardons, as well the greater as the lesser.

'And thus were the jolly pardons of the towne of Boston obtained, as you have heard, for the maintenance of their decayed port . . .'

APPENDIX

CLASSIFIED LIST OF LETTERS OF FRATERNITY

I. ISSUED BY MONASTIC HOUSES

(a) BENEDICTINES.

(i) General Chapter of Province of Canterbury.

c. 1298. To John Giffard. *Snappe's Formulary*, ed. Salter, p. 358.

(ii) St. Albans.

c. 1460. To Robert White and others. *Registr. Abb. Joh. Whethamstede* (Rolls Ser.), ii. 5.

1476. To John Say. P.R.O. Exch. K.R., Eccl. Docs. 6/57.

1471. To Hugh Spalding, chapl. P.R.O. Exch. K.R., Eccl. Docs. 6/62.

(ii a) Belvoir Priory, cell to St. Albans.

1507. To Master Robert Husy. Bodl. MS. Linc. Ch. 650.

(ii b) Hatfield Regis, cell to St. Albans.

1327. To Roger de Wautham, canon of St. Paul's. B.M. Harl. MS. 60, f. 95.

1434. To John Derham, late prior. B.M. Add. Ch. 28615.

(iii) Bury St. Edmunds.

Admission of Duke of Lancaster. B.M. Harl. MS. 638, f. 256 b.

1428. To Master Richard Caware, archd. of Norwich. *Ibid.*, f. 267 b.

1429. To William Paston. B.M. Add. 17226.

(iv) Canterbury, Christ Church.

c. 1200. To Pope Innocent III. B.M. Arundel 68, f. 34 b.

1232. To Blanche, Queen of France. *See* Douet Darcq, *Inventaire des Sceaux*, 10248.

1263. To St. Louis, King of France. *Ibid.*, 10249.

1263. To John de Wymburne, clerk. *Litterae Cantuarienses* (Rolls Ser.), ii, 457.
 1415. To Wytfrid of Iceland. *Ibid.*, iii, 137.
 1429. To Thomas Chaucer. *Ibid.*, iii, 152.
 1471. To the Bishop of Bayeux. *Ibid.*, iii, 255.
 1479. To Thomas Bulkeley. *Ibid.*, iii, 288.
 1491. To Agnes, wid. of William Tylle. *Ibid.*, iii, 315.
 1501. To Sir John Denham. Cath. Libr. Canterbury, Register R, f. 61.
 (Undated) To Dame Katherine Luvel. MS. Lambeth 20, f. 166.

(v) Durham.

1484. To John Portar. *Yorksh. Arch. Journal*, ii, 395.
 1315-1534. 184 grants. App. to *Durham Obit. Rolls* (Surtees Soc., vol. xxxi).

(vi) Ely.

1335. To Elizabeth de Burgh (in French). B.M. MS. Add. 41612.

(vii) Hyde.

1260. To Bishop and Chapter of Salisbury. B.M. Cott. Ch. viii. 1.

(viii) Muchelney (Somerset).

1317. To Sir John Speke and Elizabeth. *Somerset Record Society*, vol. 42, f. 62.

(ix) Westminster.

1485. To Bishop of Durham. Westminster Reg. Bk. 1, f. 7 b.
 1486. To Cecilia Radclyff and Agnes Clifford. *Ibid.*, f. 10 b.
 1487. To Sir Reginald Bray. *Ibid.*, f. 13.
 1490. To Sir Thomas Thwaytes. *Ibid.*, f. 46 b.
 1497. To Dame Elizabeth Sholdham, abbess of Barking. *Ibid.*, f. 93.
 1497. To Dame Elizabeth Fitzlewys, abbess of Minoreesses by Aldgate. *Ibid.*, f. 93.
 1497. To Master Henry Hornby. *Ibid.*, f. 93.
 1512. To Thomas Stanley, earl of Derby. *Ibid.*, Bk. 2, f. 33.
 1515. To Philip Underwood, monk of the Charterhouse. *Ibid.*, f. 75.
 1515. To Richard Brooks, serjeant-at-law. *Ibid.*, f. 75 b.

(x) Worcester.

1295. To Henry de Bluntesdone and John Grundwell. B.M. Cott. Ch. viii. 2.
 1309. To Master Michael de Berham. Worcester, *Liber Albus* (ed. Wilson), no. 433.
 1309. To Richard, bishop of Hereford. *Ibid.*, no. 434.
 [1309]. To Master John de Bitterley. *Ibid.*, no. 435.
 1313. To [Walter Reynauld] late bishop of Worcester. *Ibid.*, no. 606.
 1316. To John de Lacy and family. *Ibid.*, no. 675.
 [1316]. To [Thomas], earl of Lancaster and John de Holandia. *Ibid.*, no. 685.
 1316. To John Lovet. *Ibid.*, no. 688.
 1318. William de Thorntoft, R. of Dodderhill. *Ibid.*, no. 780.
 1325. To William de Sereshall. *Ibid.*, no. 1052.

(b) CLUNIACS.

1237. Hugh, abbot of Cluny to William de Vernun. Belvoir Castle Muniments, Haddon 353.

(c) CISTERCIANS.

i. By the order.

- 1183-4. Abbots of Citeaux and Clairvaux to Henry, count of Eu. Lord De L'Isle's MSS.
 (Hist. MSS. Comm. Rept., p. 40).

(g) GILBERTINE CANONS.

1352. Thomas, Master of Sempringham, to Robert Husye and Anne. Bodl. MS. Linc. Ch. 1144.

(h) HOUSES OF NUNS.

1355. St. Sexburga, Minster-in-Sheppey, to prior of Canterbury. *Lit. Cantuarienses* (Rolls Series), ii, 333.

1491. Shaftesbury to dean and canons of Windsor. Windsor Chapter Muniments, XI, E. 33. (15th cent.). Brigettines of Syon to earl of Shrewsbury. P.R.O. Exch. K.R., Eccl. Docs. 21/50.

1455. Same to prior and convent of Durham. Surtees Soc., vol. xxxi, p. 111.

1516. Same to same (pl. lxvi). Durham Treasury, Loc. 1. 27; see also Surtees Soc., vol. xxxi, p. 118.

II. ISSUED BY FRIARS

(a) BLACK FRIARS.

A. By master or general.

c. 1230. Jordan of Saxony to Henry III. P.R.O. Anc. Correspondence, vol. 62, no. 8.

1397. Raymund, master, to convent of St. Bartholomew, Newcastle. P.R.O. Exch. K.R., Eccl. Docs. 6/44.

1401. Thomas de Firmo, master, to London Charterhouse. P.R.O. *Ibid.*, 6/45.

1444. Bartholomew, master, to prior and monks of Ch. Ch., Canterbury. Cathedral Library, Canterbury, Reg. N, f. 215.

B. By provincial prior.

t. Ed. II. Aymeric, provincial master, to abbot and convent of St. Augustine's, Canterbury. *Decem Scriptores*, ed. Twysden, p. 2008.

1368. Thomas de Bodekysham, p. p., to William Riburgh and Joan. P.R.O. Ancient Deeds, A. 13187.

1413. John Tille, p. p., to prior and convent of Lanthony by Gloucester. Bodl. MS. Top. Glouc. C. 5, p. 655.

1422. Thomas Waryn, p. p., to William and Alice Hereson. B.M. Stowe Ch. 605. dat. York.

1462. John, provincial in England, to [name illegible]. B.M. Add. Ch. 17136.

1485. John Payne, p. p., to Master Henry Langley and Katherine. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 30.

1504. . . . p. p., to Sir Gilbert Talbot (*abstract only*). See *Collins's Peerage*, iii. 30.

1507. Robert Felmyngham, p. p., to John Bery and Margaret (*translation*). Kirkpatrick, *Rel. Orders of Norwich*, p. 37.

C. By local prior.

1418. . . . l. p. of Boston, to John Dymoke of Scrivelsby and family. Bodl. Dodsw. MS. 49, f. 81.

1478. Christopher Roughton, l. p. of Warwick, to [blank]. P.R.O. Exch. K.R., Eccl. Docs. 6/60.

1484. Robert Ellysmer, l. p. of Salop, to Thomas Wittecome and Elizabeth. Bodl. MS. Gough, Salop 6, f. 67.

1485. Stephen Assche, l. p. of Ilchester, to John Kendale and Maud. Bridgwater Borough Records, no. 108.

1489. Robert Jacsone, l. p. of Derby, to the Lady Clinton and Robert Willoughby. *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 121.

210 SOME FURTHER LETTERS OF FRATERNITY

1502. . . . 1. p. of Cambridge, to Sir Gilbert Talbot and Ethelrede (*abstract only*). See *Collins's Peerage*, iii, 30.
 1520. Richard Godryk, 1. p. of Lincoln, to Edith Hosey. P.R.O. Exch. K.R., Eccl. Docs. 6/68.

(2) GREY FRIARS.

A. By minister general and his vicar.

1407. Anthony de Pereto, m. g., to Ralph Nevyll, earl of Westmoreland, and Joan. P.R.O. Exch. K.R., Eccles. Docs. 21/49.
 1412. The same, to Sir John Pelham and dame Joan (admitting to prayers of Minoresses). dat. London. B.M. Add. Ch. 29260.
 14— The same (?) to Beatrice Ros. Bodl. MS. Rawl. C. 72 (fly-leaf at end).
 1420. Thomas, vicar of m. g., to Thomas Compston and Joan (admits to prayers of province). *Collectanea Anglo-minoritica*, p. 196.
 1524. Francis de Angelis, m. g., to Sir John Kirkham and family. *Ibid.*, p. 225.

A 1. By Cismontane Observants.

1475. Angelus de Clavasio, vicar-general, to Luca dei Ugolini. Dr. A. G. Little.
 1533. Francis Faber, deputy of commissary-general, to prior and convent of Durham. Durham Treasury, Misc. Charters, no. 6628.

A 2. By Friars Minors of the Holy Land.

1471. Silvester de la Noe, procurator, to Thomas Gee and Alice. P.R.O. Exch. K.R. Eccl. Docs. 6/55.
 1473. Franciscus Placentinus, gardianus et rector, to John Yngelande and Agnes. Dr. A. G. Little.
 1473. Same to Laurence Roche, priest. Rev. E. R. O. Bridgeman.

B. By provincial minister.

1407. John Zouch, pr. min., to William Lord Ferrers and Philippa. Port Adelaide Institute, S. Australia.
 1432. Richard [Leek], pr. min., to Thomas Bate and his children (*translation*: dat. Norwich. Signed by Robert Carlton?, local gardianus). Kirkpatrick, *Hist. of Rel. Orders of Norwich*, p. 124.
 145—. Thomas, pr. min., to John Baly and Katherine. B.M. Sloane MS. 1617, 76 b (fly-leaf at end).
 1459. Thomas, pr. min., to Sir Edmund Houden and Agnes. P.R.O. Exch. K.R., Eccl. Docs. 19/60.
 1462. Thomas, pr. min., to John Marchal and Isabella. dat. London. *Archaeologia*, xi, 85.
 1467. Thomas, pr. min., to Roger at Wynde and Isabella. B.M. Sloane MS. 1617, 1 b (fly-leaf at beginning).
 1469. Thomas, pr. min., to John Wormley and Cecilia. *Archaeologia Aeliana*, new ser. iii, p. 146.
 1470. William, pr. min., to Thomas Bucke and wife. B.M. Add. Ch. 37678.
 1475. William, pr. min., to Fellows of Pembroke College, Cambridge. Pembroke College, Box A, 23.

C. By local head or *gardianus*.

1409. William, gardianus of Bridgwater, to William Dyst and Joan. Bridgwater Borough Records, no. 110.

1426. . . . minister of F. M. of Newcastle-on-Tyne, to John Fenwick and Elizabeth Halle his wife. Bodl. Dodsw. MS. 49, f. 5.
1473. John, 'prior' of F. M. of Newcastle-on-Tyne, to John Swynburn and wife (*transcript*). *Ibid.*, 45, f. 51.
1479. John, gardianus of F. M. of Stafford, to William Hocket and Agnes. P.R.O. Exch. K.R., Eccl. Docs. 6/61.
1479. Robert, gardianus of F. M. of Bridgwater, to John Kendale and Maud. Bridgwater Borough Records, 109.
1479. Same to Marmaduke Lumley 'ordinis sci Johannis baptiste'. *Ibid.*, 878.
1479. Same to William Kendale. *Ibid.*, 879.
1479. John, gardianus of F. M. of Bristol, to William Spicer and Agnes. *Ibid.*, 880.
1479. R., gardianus of F. M. of Doncaster, to Roger Alyn and Margaret. P.R.O. Chanc. Misc., Bdle. 15, File 6, no. 13.
1479. The same to John Denton and Christina. Preserved among Lord Allendale's Documents.
1479. R., gardianus of F. M. of Salop, to Thomas Mytton and Elizabeth. Printed in Owen and Blakeway, *Hist. of Shrewsbury*, ii, p. 462 n.
1479. James, gardianus of F. M. of Preston, to Laurence Horrokys and family. Cambr., Fitzwilliam Museum, MS. no. 227.
1479. John, gardianus of F. M. of Canterbury, to [blank]. Bodleian Charters, Kent 153.
1479. John, gardianus of F. M. of Nottingham, to Thomas Hede and Margery. *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 117.
1479. The same to Richard Hede. *Ibid.*, p. 118.
1479. William, gardianus of F. M. of Hartlepool, to Sir Robert Claxton and Agnes. Durham Treasury, MS. Misc. 6859*.
1479. John, gardianus of F. M. of Cambridge, to Andrew Duket (first president of Queens' College). Printed in Searle, *Hist. Queens' College*, p. 54.
1479. Lewis, gardianus of F. M. of Chester, to Sir Nicholas Kerke. Chester Arch. Soc. MSS.
1481. William, gardianus of F. M. of Bedford, to Nicholas Wallys and Joan. The late Dr. W. Seton, Univ. Coll., London.
1483. John, gardianus of F. M. of Stafford, to John Green and Agnes. S. A. H. Burne, Esq., Cheadle, Staffs.
1461. Uncertain, probably Franciscan. William Lyale, presbyter, 'capellanus honeris sepulcri domini nostri Ihesu Christi in Ierusalem proctor ecclesiarum', to Richard Erle, gen. Printed in *Arch. Journal*, xvii, p. 254.
1372. Possibly Franciscan. A fragment in Eton College Library, MS. 170.

(3) AUSTIN FRIARS.

A. Issued by general, or his vicar.

- 135-. By David, vicar of prior-general, to Helen Beaupo . . . (admits to prayers of province). P.R.O. Chancery Misc., Bdle. 15, File 6, no. 4.

B. By provincial prior or chapter.

1279. By *diffinitores* and prov. chapter to Brian de Brompton and Emma. dat. Yarmouth. Kinlet Hall, Salop.
1369. By Geoffrey [Hardeby], p. p., to John Thornholme and Margaret. dat. Hull. Yorkshire Archaeological Society.

1383. By Thomas, p. p., to Giles Tyler and Christina. dat. Salop. Lambeth MS. 172 (fly-leaf at beginning).
1404. By William, p. p., to William Makney and Joan. dat. Oxford. Countersigned 'Rob't' Blak'. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 28.
- ante* 1409. By Thomas, p. p., to John Lowe and Margery (fragment only). Lord De L'Isle's MSS.
1427. By Thomas, p. p., to Robert Deyn and Isabel. dat. Tickhill. B.M. Add. Ch. 20599.
1438. By William, p. p., to John Morton and Juliana. dat. York. Bodley MS. 131 = 1999.
1440. By William, p. p., to Robert Norys and Joan. dat. Cambridge. B.M. Sloane Ch. xxxii, 28.
1445. By Thomas, p. p., to Dame Katherine Howard. dat. Clare. *Lord De L'Isle's MSS.* p. 220 (Hist. MSS. Comm.).
1475. By Thomas, p. p., to Thomas Stanton and Elizabeth. dat. London. B.M. Harl. MS. iii. C. 23.
1480. By Thomas, p. p., to Robert Cotwall and Margaret. dat. Salop. Owen and Blakeway, *Hist. Shrewsbury*, ii, 455 *n*.
1526. William Aller, p. p., to members of St. John's Gild in Wakering Church, Essex (printed). B.M. Dept. Printed Books, c. 18. e. 2 (16).
Another copy. Soc. Antiq. Broadsides, vol. i, 2 B.

C. By local priors and convents.

1481. Thomas, l. p. of Salop, to John Spenlove and Margaret. Shrewsbury Museum.
1482. Thomas, l. p. of Woodhouse, to John Cleberi and Alice. Shakenhurst, Salop.
1511. John Tanfield, l. p. of York, to the Lord Darcy (grant of perpet. trental and share in suffrages. Confirmed by John Stokes, p. p.). Madox, *Formulare Anglicanum*, dxcix.

(4) CARMELITE FRIARS.

A. Issued by prior-general.

1414. John, general, to prior, etc. of Lanthony. Bodl. MS. Top. Glouc. C. 5, p. 655.

B. By provincial prior.

1368. Thomas, p. p., to John Browne and Ymggota. Bodl. Dodsw. MS. 53, f. 77 *v*.
1382. Robert, p. p., to Giles Tyler and Christina. Lambeth MS. 172, fly-leaf at end.
1400. . . . p. p., to John Horssyngton and Alice. Peterho. Cambr. MS. 251, fly-leaf.
- 1469 (?). Stephen, p. p., to Sir William . . . Bodl. Rawl. MS. C. 72, fly-leaf at beginning.
1512. Robert, p. p., to Sir Henry Willoughby and Dame Helen (printed). *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 127.

C. By local priors.

1376. Henry, l. p. of Sutton [by Plymouth], to William Forneaux and Joan. 'The Walrond Papers'.
1387. Mangerus, l. p. of York, to Roger Low. Bodl. MS. Hearne's Diary 131, p. 1.
1396. William, l. p. of Scarborough, to Agnes Wyndhyll. Bodl. MS. 131, f. 150.
1416. William, l. p. of Oxford, to John Lincott and Agnes. B.M. Add. Ch. 5837.

(5) TRINITARIAN FRIARS.

(a) Knaresborough (Yorks.).

1412. Richard, minr., to Sir Hugh Fitzhugh and Elizabeth. In possession of Rev. C. S. Slingsby, Scriven Park. *Yorks. Arch. Journal*, xvi, 415.
1449. Richard, minr., to Sir William Bakerston (in form for priests) (cross of the order). In possession of Edmund Starkie, Esq., Huntroyde, Padiham. *Ibid.*, xix, 64.

1463. Robert, min^r., to the St. Quintin family. At Scampston, near Malton, Yorks.
 1465. Robert, min^r., to Henry Rychmond (afterwards King Henry VII). Westminster Abbey Muniments, 6658*.
 1480. Robert, min^r., to Robert Plompton and Agnes. In possession of Rev. C. S. Slingsby (as above). *Yorks. Arch. Journal*, xvi, 417.
 1491. Robert Bolton, min^r., to John Dod and Matilda. *Arch. Journal*, xxiii, p. 145.
 1501. Robert, min^r., to John Nethgatt and Margaret. In possession of J. Lister, Esq., Shibden Hall, Halifax. *Yorks. Arch. Journal*, xvi, 419.
 1512. Robert, min^r., to Richard Gilybrand, Chaplain (in form for priests). In possession of Edmund Starkie, Esq. (as above). *Ibid.*, xix, 64.
 1527. Oswald, min^r., to Richard Cornay and Halison. In possession of Rev. C. S. Slingsby (as above). *Ibid.*, xvi, 420.

(b) Hounslow (Middlesex).

1446. John Wodhulle, min^r., to James Gloys, chaplain. B.M. Toph. Ch. 48.
 1466. John, min^r., to Thomas Stoner, Esq., and Joan. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 29.
 1479. William, min^r., to Master William Chaddeworth and Joan. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 14.
 1508. Ralph Bekwith, min^r., to Henry Prince of Wales. B.M. Stowe Ch. 617.

(c) Moddenden (Kent).

1477. Richard, min^r., to J. Prense and others (cross of order). In possession of W. S. Chisenhale-Marsh. Gaynes Hall, Essex. *Essex Arch. Soc.*, new ser., vi, p. 107.
 1485. Richard, min^r., to Henry Langley and Katherine (recital of benefits) (cross of order). P.R.O. Chancery Misc., Bdle. 15, File 6, no. 16.
 1487. Richard, min^r. and provincial, to [blank]. B.M. Stowe Ch. 613.
 1494. Richard, min^r., to John Dering of Surrenden. Hasted, *Hist. of Kent*, ii, 391.
 1494. Richard, min^r., to John Davy and Elinor. Bridgwater Borough Records, no. 265.

(d) Ingham (Norfolk).

1506. Thomas, min^r., to William Fette and wife (recital of benefits). B.M. Stowe Ch. 616.
 1506. Thomas, min^r., to John Smith and Agnes (recital of benefits) (cross of order). P.R.O. Chancery Misc., Bdle. 15, File 6, no. 19.

(e) Thelisford (Warwick).

1486. Roger, min^r., to Richard Harrys. B.M. Harl. MS. 43. A. 12.
 1494. John Brockteyn, min^r., to Issabella Bromwyche. P.R.O. Court of Wards. Deeds, 239/2.
 1529. J. Brocden, min^r., to [blank]. Block of four printed impressions never used. Lambeth Pal. Library, frg. 4.

(f) Walknoll (Newcastle-on-Tyne).

1438. John, min^r., to Robert Claxton and Anne. Durham Treasury, Misc. Charters, no. 6859.
 146-(?) [blank] to Sir John Langhorne (imperfect copy). In possession of Northumberland Co. Hist. Comm.).
 1470. . . . to William Boynton and Alice. Bodleian Library MS. Dodsworth 32, f. 133 v.
 1480. Richard, min^r., to Ralph Wederington and Felicia. *Ibid.*, 45, f. 91.

(6) CRUTCHED FRIARS.

1528. William Bower, prior, to [blank] (printed by Pynson). S.T.C. 3433. Bodl. Fol. 8. 657 (6).
 Another copy. *Ibid.* (9).

III. ISSUED BY HOSPITALS

(1) BURTON LAZARS, LEICESTERSHIRE.

1463. William, master, to parishioners of East and West Hagbourne. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 27.
 146-. William, kt., master, to William Danyel and Alys. B.M. Add. Ch. 19864.
 1473/4. Bro. William, master, to Robert Bostokke, Joan, and family. Leicester Corporation Archives, Box G, no. 369.
 1475. Bro. Wm. Sutton, kt., master, to William Baughton. Bodl. Charters, Leic. 4.
 1481. Bro. Wm. Sutton, kt., master, to John Dod and Matilda. *Arch. Journal*, xxiv, 265.
 1486. Bro. Geo. Sutton, kt., master, general indulgence. *The Ancestor*, vol. vi, p. 45, no. cci.
 1486. Bro. George, master, to [blank]. B.M. Woll. Ch. 8. 13.
 1487. Bro. George, master, to John Lane and Joan. Bodl. MS. Top. gen. c. 23, f. 22.
 1492. Bro. George Sutton, kt., master, to Edward Knyvate and Elizabeth his daughter. B.M. Harl. MS. 43. A. 13.
 1497. Sir George Sutton, kt., to Margaret Bowis. Library of the late Sir William Osler.
 1505. Thomas Norton, kt., master, to Edward White. *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 125.
 1507. Thomas Norton, master, to [blank]. B.M. Add. Ch. 37362.
 1510. T. Norton, kt., master, to Thomas West and Joan. B.M. c. 18, e. 2 (7).
 1512. Thomas Norton, kt., master, to Elizabeth Vachell. B.M. Stowe Ch. 619.
 1513. Thomas Norton, kt., master, to Sir Simon Morell. B.M. Stowe Ch. 620.

(2) BY CHAMBERLAINS, WARDENS, AND PROCTOR OF THE HOSPITAL OF HOLY TRINITY AND ST. THOMAS THE MARTYR, ROME.

1389. To John Budde and Alice his wife, Philip and Joan, his parents. B.M. Add. Ch. 58271.
 1446. To Robert Westmerland, monk of Durham. Durham Treasury, Loc. 1. 45.
 1447. To John Pelham, sen., kt., and dame Joan. B.M. Add. Ch. 29263.
 1448. To William Cecyl, Margaret his wife, and Robert Mallowe. P.R.O. Exch. K.R., E cl. Docs. 6/54.
 1449. To [blank]. Chester Arch. Soc. MSS.
 1449. To John Wheler, Elizabeth his wife, and John his son. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 7.
 1459. To John Gover. Bridgwater Borough Records, no. 1394.
 1459. To John Pelham, kt., and Joan. B.M. Add. Ch. 29264.
 1459. To Thomas Jeffre and Joan. B.M. Stowe Ch. 609.
 1459. To William Hosi and Joan. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 9.
 1461. To William Kyrmond and Elizabeth. *Arch. Journal*, xvii, p. 252.
 1474. To Thomas Walton, Alice, and children. *The Ancestor*, vi, p. 45, no. cc.
 1475. To Peter Claughton and wife. P.R.O. Exch. K.R. Eccl. Docs. 19/62.
 1475. To Henry Langley and Katharine. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 11.
 1476. To William Pelham and Katherine. B.M. Add. Ch. 29265.
 1476. To J. Key. B.M. Add. Ch. 34269.
 1477. To Edmund Paston. B.M. Stowe Ch. 611.
 1486. To John Reskenner. P.R.O. Exch. K.R., Eccl. Docs. 19/64.
 1497. To Thomas Garway, chapl. P.R.O. Court of Wards, Deeds, 239/6.
 1476. Certificate by Abbot of Abingdon, papal commissary, to Joan Darell, that she is a sharer in the indulgences granted to the Hospital. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 12.

(3) WALSOKEN.

By warden or master of Hospital of Holy Trinity.

1461. Eborardus, custos, to Thomas Hutton and . . . Dekkys. Parkin, *Hist. Norfolk*, ix, 129.
 1465. " " to John Yngland and Agnes. P.R.O. Exch. K.R., Eccl. Docs. 21/49.
 1466. " " to [illegible]. P.R.O. Exch. K.R., Eccl. Docs. 6/54.
 1468. Thomas Jakson, warden, to Ralph More and Isabella. B.M. Add. Ch. 44277.
 1468. " " to Morris ap Jenkin and Margaret. Parkin, *Hist. Norfolk*, ix, 130.
 1470. Thomas Jakson, master, to William Bewschen and Alice. P.R.O. Ancient Deeds, C. 5225.
 1476. Thomas Jakson, master, to John Berners, Esq. Parkin, *Hist. Norfolk*, ix, 130.
 1496. Edward Hanyter, magister et custos, to George Catesby and Elizabeth. B.M. Cotton Ch. xxi. 42.
 1505. Thomas Honyter, master or warden, to Mr. John Willoughby and Anne (printed on parchment). *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 125.
 (date John Whetham, magister sive custos, to [blank] (printed), B.M. Dept. Printed Books, cut off) c. 18. e. 2 (9).

(4) VARIOUS HOSPITALS.

1318. Prior and brethren of St. Bartholomew's, Gloucester, to John de Thormerton. *Archaeologia*, xiv, p. 267.
 1442. John Carpenter, master of St. Anthony's Hospital, London, to W. B. M[onk] of Worcester. MS. Bodl. 692, p. 111 b (printed in *Correspondence of Bekynton* (Rolls Ser.), ii, 357, 8).
 1447. John Gotheworth, master of 'Knollesalmeshous', Pontefract, to Richard earl of Salisbury and Alice. P.R.O. Exch. K.R., Eccl. Docs. 18/23.
 1515. Johannes Calepolensis episcopus, master of the house of St. Thomas the Martyr, called of Acon, in the city of London, to Thomas Burton, monk. B.M. Dept. Printed Books, c. 18. e. 2 (122).
 1519. John Cavalat[i], warden of hospital of St. Mary of Bethlehem, London, to [blank] (printed by Pynson). Soc. Ant. Lond. Broad-sides, vol. i, no. 2 A.
 Another copy. Rylands Library, Manchester.
 Four copies, two imperfect. B.M. Dept. Printed Books, c. 18 e. 2 (12, 12*, 13, 14).
 Two copies, blank. Bodl. Libr. Arch. Bodl. A. iv, 53, ff. 8 and 9.
 1519. Philip Mulert, comm. gen. for England and Ireland, of Hospital S. Spiritus de Saxia, Rome, to [blank]. Printed by Fakes. Bodl. Libr. A. iv. 43 (18) and (20).
 Another copy. B.M. Dept. Printed Books, c. 18. e. 2 (123).
 1520. Another issue (printed by Pynson). B.M. Dept. Printed Books, c. 18. e. 2 (15).
 Another copy. Bodl. Libr. Auct. iv. Q. 121, f. 35.

IV. ISSUED BY GILDS

(1) GILD OF ST. MARY-IN-THE-SEA (Newton, near Ely, Cambs.).

1408. Thomas Blowyk, master, to Margaret Heryng and John her son. B.M. Stowe Ch. 604.
 1497. William Doughty, LL.B., master, to Thomas Smyth and Isabella. B.M. Add. Ch. 15675.
 1502. William Thornburgh, LL.D., master, to Anne Kaye. B.M. Add. Ch. 15676.
 1503. William Thornborough, master, to John Wanley and Agnes (printed). P.R.O. Exch. K.R., Eccl. Docs. 6/55.

1504. William Thornburgh, master, to Dame Katherine Langley. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 20.
1505. William Thornburgh, master, to Thomas Barowe. B.M. Add. Ch. 15677.
1512. William Thornburgh, master, to Sir Gylpin Calthorp and Dame Joan. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 21.
- (2) GILD OF ST. MARY IN THE CHURCH OF ST. BOTOLPH, BOSTON (all printed except the first).
1492. Admission of Thomas Haryson, rector of Brisley. B.M. Stowe Ch. 614.
1505. Admission of [blank] (on vellum by W. Fakes). Watt, *Bibliotheca Britannica*, p. 356 v.
1507. Admission of Thomas Case and Margaret (month, day, and year of century filled in). P.R.O. Chancery Misc., Bdle. 15, File 6, no. 18.
1508. Admission of Richard Woolman (on vellum by W. Fakes). Watt, *Bibliotheca Britannica* (as above).
- 15—. Admission of Katherine Langley. P.R.O. Chancery Misc., Bdle. 15, File 6, no. 31.
- 15—. Admission of [blank] (R. Pynson). Westminster Abbey Muniments, 6655.
1518. Admission of John Pickering, clerk (R. Pynson). Westminster Abbey Muniments, 6656.
1519. Admission of Thomas Willoughby, Esq., and Brigitt (R. Pynson). *Lord Middleton's MSS.* (Hist. MSS. Comm.), p. 133.
1521. Admission of John Rodcliff and Margaret (R. Pynson). Bernard Quaritch, London.
1522. Admission of Wylleam Noryes and Ellena. Messrs. Ellis, London.
1522. Admission of Edna Hoose [Hussey]. S.T.C. 17550 (R. Pynson). B.M. Dept. Printed Books, C. 37, f. 31.
1531. Admission of William Richardson and Margaret (R. Fakes). Downside Abbey, Bath.
1535. Admission of Thomas Baregh. B.M. Dept. Printed Books, C. 23. a. 22.

(3) OTHER GILDS.

Fraternity of the chapel of St. John Baptist at Northnewington in the parish of Broughton, near Banbury.

1521. Two copies, not quite identical, both blank. Bodl. Libr. A. iv, 43 (1).

Gild of the chapel of St. Margaret, Uxbridge.

1527. Blank form of admission, printed by R. Fakes. Soc. Ant. Lond. Broadsides, vol. i, no. 3.

V. ISSUED BY BODIES OF SECULAR CLERKS

(1) COLLEGES.

All Souls College, Oxford.

1465. William Poteman, warden, and college to John Birkhede. Printed in Gutch's *Collectanea Curiosa*, ii, 267.
1536. Robert Woodward, warden, and college to abbess and convent of Syon. *Ibid.*, ii, 268 (a further list of eight beneficiaries mentioned).

(2) CATHEDRAL CHAPTERS.

1503. Dean and chapter of Lichfield, to John Arundell, Bishop of Exeter. Lichfield Chapter, Acts Book, iii, p. 66 v.
1512. The same to earl and countess of Derby and others. *Ibid.*, f. 106.

X.—*Notes on the Armour of the Maximilian Period and the Italian Wars.*
By J. G. MANN, Esq., M.A., B.Litt., F.S.A.

Read 18th April 1929

THE term 'Maximilian' as applied to armour of a fairly clearly defined style and date is one of those names, found in all branches of archaeology, which in spite of their admitted inaccuracy contrive to obtain a general currency as a terse and convenient label. It is at all events nearer the mark than the name 'Gothic', as used to describe the style immediately preceding it, for it marks a period which coincided with the latter half of the Emperor's reign and endured for some fifteen years after his death.

The present use of the term does not go back much farther than the middle of the nineteenth century. It appears to have been adopted by F. Gille in his introduction to the large lithographic work on the collection in the Imperial Hermitage, the first ten parts of which had come out by 1840,¹ where he writes *Nous croyons donner le nom de 'maximilienne' à cette espèce d'armure de bataille, la plus pratique que nous connaissions*. Another term applied more particularly to the fluted armours of this period was 'Milanese', but it was inevitable that it should not survive when it was found that the great majority of existing armours of this kind are of German design and manufacture. Yet we shall have occasion to note that the influence of Milan was not inconsiderable in forming the style in its earlier years. The Maximilian label, on the other hand, has received support from the Emperor's known interest in the devising of new armours, as described in a much quoted passage in the *Weisskunig*, and from the assumption therefrom that any new style which came into existence in his reign must have been due to the inventive genius of the Emperor himself.

As a familiar feature of our armouries the Maximilian style has been rather taken for granted. The writers of text-books have usually been content to represent it by one or two instances of German fluted armours, as though this fashion were universal. Sir Noel Paton has represented the battle of Flodden with the combatants of both sides clad in fluted armours of the German style, such as he possessed in his own collection, but which we imagine were very few and far between on the border battlefield. The system of dating armour on evolutionary grounds must be frequently checked by

¹ *Musée de Tzarskoe-Selo, ou Collection d'Armes de S. M. l'Empereur de toutes les Russies*, St. Petersburg and Carlsruhe, 1835-53.

contemporary data, otherwise it tends to get out of scale, and every allowance must be made for the individual types favoured by different centres of manufacture. Sir Guy Laking¹ was the first to draw attention to the separate character of the Italian armours of this period, but unfortunately lack of space prevented him from examining the material in detail. That it is worthy of the closest study is evident when we turn to the history of the time and note the influence which these years had upon the art of war.

For nearly two hundred years Italy had been left alone by the northern nations when in 1494 Charles VIII made his sudden descent upon the kingdom of Naples, and opened a new era in which Italy became for thirty years the battleground of the rival powers of Europe. The long succession of battles, Fornovo, Cerignola, Agnadello, Ravenna, Novara, Marignano, and Pavia, fill a crowded page of history. Those who believe that the liberal arts cannot flourish in the atmosphere of war may be surprised to remember that during this time Michelangelo was painting the roof of the Sistine Chapel for a pope who conducted his campaigns in person, and Aldus Manutius was printing his editions of the classics when the very existence of Venice was being threatened by the League of Cambrai. How close was the contact between the arts of war and peace is shown by the life of the sculptor Torrigiano, who came over to England to make the tomb of Henry VII in Westminster Abbey, but who spent a great part of his life as a professional soldier.

When Charles VIII entered Italy he led an army of the medieval fashion, its knights still clad in Gothic armour and with heavy cavalry as the dominating feature of its composition. Within a very few years the meeting of north and south had produced a change. The deadly Swiss infantry and their rivals the German landsknechts, the Spanish light horse, and the stradiots made their presence felt. The enthusiasm of the day in all matters of science rapidly improved on the clumsy experiments of the middle ages in the matter of fire-arms, and the troops engaged became for the first time trained and organized armies of the modern type. We need not be surprised if this period of intense military activity was accompanied by new developments in armour and an enormous output from the workshops of Nürnberg, Augsburg, and Milan. The Italian wars provide the spectacle of the old and the new theories of warfare existing side by side. The Chevalier Bayard was a staunch supporter of the old school, and Maximilian called himself *Der letzte Ritter*; while on the other side we find Machiavelli writing his *Arte della Guerra* and pressing the case for a national militia.

I do not propose to deal with armour for the tournament, especially at

¹ *Record of European Arms and Armour through seven centuries*, 1920-2, vol. iii, chapter xxiv.

this date when it has become a large subject in itself, nor with the purely parade-armours, except to disentangle them from the field-armours with which they are so often confused. This period is important as being the last in which full armour was worn in the field as a matter of course, and the first of which we have an abundance of material to hand.¹ In spite of the increased efficiency and tactical handling of light cavalry, pikemen, and arquebusiers, the heavy-armoured man-at-arms still remained an important factor. His prestige was as yet undiminished. His was still the only arm in the ranks of which a gentleman could decently serve, and the younger sons of Europe who flocked to the Italian wars were legion. Although historians tell us that the death-blow to heavy cavalry was dealt by the battle of Courtrai in 1302, and repeat the assertion anew for each successive war down to the time of Pappenheim's *Reiters* and Colonel Haselrigge's 'lobsters', we cannot fail to observe that the armoured horseman took a long time to die. The reason for this was the simple one that he still had his uses. His armour gave him something of the invulnerability of the modern tank, and the force and impact of his charge were tremendous. One has only to turn over the pages of the *Weisskunig* or look at any of the engaging battle-pictures of the day to see that the mounted man-at-arms still held the imagination of the artist in his conception of what a battle should be.

The evolution of the 'Maximilian' fashion of armour with its round contours and channelled surfaces, which appeared shortly after the beginning of the Italian wars, must be traced to a coalescing of the previous Italian and German styles. It arrived so suddenly, without any marked period of transition, that we have to look closely to discover signs of the coming change.

Throughout the fifteenth century the Missaglias of Milan had been regularly turning out Gothic armours of rounded build with plain surfaces, of which no better instance exists than the well-known armour of Frederick the Victorious at Vienna, while in Germany armour had followed the northern Gothic fashion and lent itself to slender, pointed forms and attenuated lines. In its later stages this effect was further enhanced by shell-like flutings

¹ Excluding the armours of the monarchs, there are twenty-three suits at Vienna ascribed to persons who took an active part in the Italian wars, 1494-1529. Most of them are clearly of later date, but eight come within our province, viz. no. 11 G. M. Fregoso, no. 124 Fr. Gonzaga, m. of Mantua, no. 146 Matthias Lang, no. 149 Marx Sittich v. Hohenembs, no. 175 A. v. Sonnenburg, no. 178 Ch. de Bourbon, no. 207 G. v. Freundsberg, no. 226 C. v. Bemelberg. We mention below the armours at Paris ascribed to Galliot de Genouillac, Robert Comte de la Marck, and others who fought in Italy. The 1849 catalogue of the R. Armeria at Madrid attributes armours to Antonio de Leyva, the marquis of Pescara, and Juan de Aldana, but these titles are omitted from the later catalogue as unfounded. It is believed that Lautric's sword was until recently preserved in a country church in N. Italy.

and rippled surfaces, and it is interesting to contrast the armour made at Nürnberg for Maximilian himself in his younger years, also at Vienna (no. 43), with contemporary Italian fashion. At Nürnberg by the end of the fifteenth century the Gothic style had reached its most fanciful elaboration, delighting in spires and pinnacles, whether in wood-, stone-, or metal-work, while in Milan the return to horizontal composition which characterized the Italian Renaissance was already well established. We look, therefore, for the first signs of coalescing between the two styles, the German and the Italian, somewhere midway between Nürnberg and Milan, and we find an equidistant point at Innsbruck, where Maximilian held his court. The forms of his own armours now preserved in the Kunsthistorisches Museum at Vienna present an interesting series and provide fuller data for observing the change from Gothic to 'Maximilian' styles than we can find elsewhere.¹ The superseding of the long pointed Gothic toes by the broad round-toed sabatons of the Maximilian fashion came in at the turn of the century² and must have been a welcome change from the point of view of comfort. The adoption of the Italian pauldron with modifications, the use of laminated tassets of numerous plates in place of 'tuiles' of one, and mitten gauntlets with short round cuffs in place of pointed ones with separate fingers, are also signs of the new fashion.

If we compare two effigies by Tilman Riemenschneider, apparently executed within a short time of each other, as the composition and treatment is the same in both cases, these changes are clearly discernible. That of Konrad von Schaumburg, †1499, in the Marienkapelle at Würzburg (pl. LXVII, fig. 2), shows an armour of pure German Gothic form: that of Johann Bibra, who died in 1473 but whose tomb must have been executed thirty years later, at Bibra, shows a rounded armour of early Maximilian form (pl. LXVII, fig. 3). The last tomb to show pure German Gothic armour is that of Hans von Rodenstein, †1526, at Krumbach,³ but so belated is it that we imagine that it must have been set up

¹ There are five armours attributed to Maximilian himself in the K. H. Museum, Vienna: No. 43 in the guide of 1889 is a Gothic armour similar to the Archduke Sigismund's and bears the Nürnberg mark. No. 62, believed to have been made in 1493, is still Gothic in outline and bears the Augsburg fir-cone and a mark attributed to Lorenz Colman. No. 67 is a composite suit, part Gothic, part of later style; its gauntlets are dated 1511. No. 7, the 'saltire' suit, is 'Maximilian' in outline with laminated tassets and mitten gauntlets in the new style. It has no armourer's mark. Compare also the armours of his son Philip (no. 9), G. Maria Fregoso (no. 11), Francesco Gonzaga (no. 124), and the anonymous armour (no. 60).

² Tomb of Leonhard Count von Görz, †1500, at Lienz, *K. H. Atlas*, 1892, Pt. X, pl. LXVII. English brasses begin to show this feature about 1490, e.g. John Evans, †1488, at Murston, Kent; Henry Covert, †1488, at North Mimms, Herts.; Sir W. Pecche, †1487, Lullingstone, Kent. These three might belong to the early sixteenth century, except that they all carry the sword slung in front like the earlier Gothic examples.

³ Hefner-Alteneck, *Trachten*, 1840-54, vol. iii, pl. xxii. There is an interesting example of

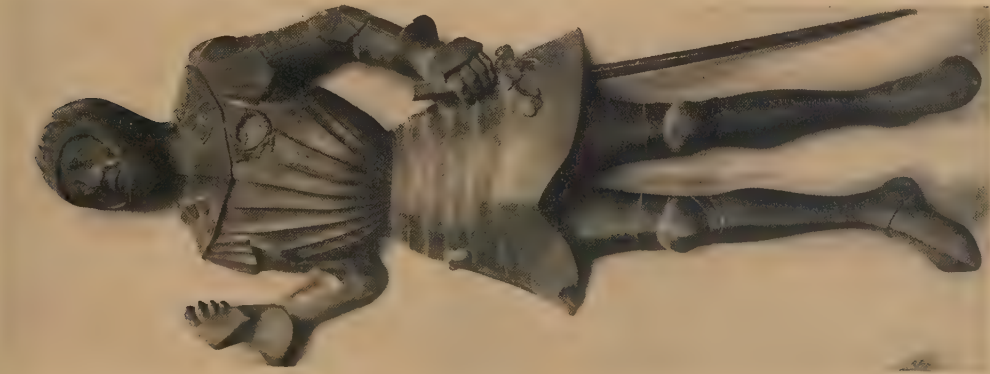


Fig. 1. Tomb of Conrad von Weinsberg, d. 1446. Schöntal on the Jagst. From a cast in the Germanisches Museum



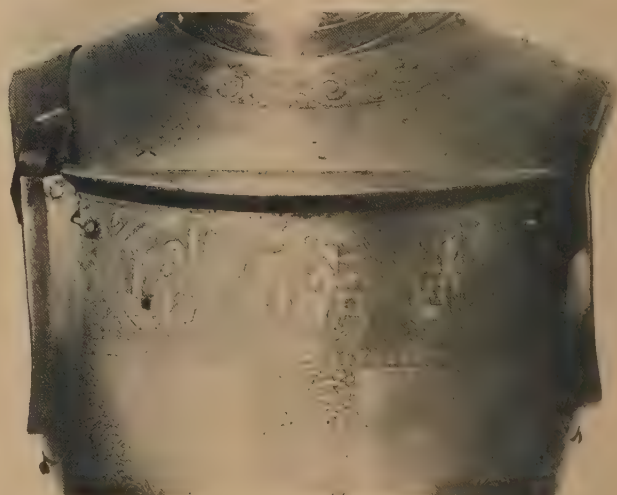
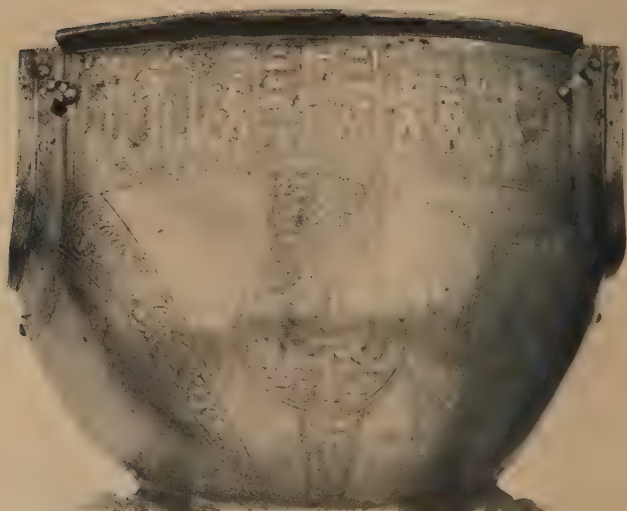
Fig. 2. Tomb of Conrad von Schaumberg, d. 1499, in the Marienkapelle, Würzburg. By Tilman Riemenschneider. In Gothic armour



Fig. 3. Tomb of Johann von Bibra, d. 1473, at Bibra, executed about thirty years later by Tilman Riemenschneider. In early Maximilian armour



Fig. 1. Armour, c. 1500. Wallace collection
(No. 316)



Figs. 2 and 3. North Italian etched breast-plates in the armoury
of the Castle of Churburg, c. 1500-10

in his lifetime. This is an instance of the constant danger attendant on dating armour by tombs, when one knows the date of decease but not necessarily the date of execution. But whereas tombs and brasses are the main documents for dating armour of the fourteenth and fifteenth centuries, the Maximilian era provides us with a wealth of new data in the form of woodcuts and engravings and portraits on panel, of which the exact date of execution is often known. The well-known drawing by Albrecht Dürer in the Albertina, representing a study for his print of the Knight, Death, and the Devil, bears the remark 'This is the armour worn in Germany at this time'¹ and the date 1498. The armour represented is of late Gothic type, but with large pauldrons with upstanding neck-guards foreshadowing the new fashion.

The coalescing of the German and Italian styles, which we have advanced as the cause of the evolution of the Maximilian fashion, did not mean that all national features disappeared, or that the German and Italian armours of this period are indistinguishable from one another. Far from it; in fact it might be better to say that the two styles exchanged certain features. The Italians borrowed the idea of a fluted surface from the German Gothic armours,² developed it in a more rigid style, and left the Germans to exploit it further in the form of the heavy fluting which is so characteristic of their armour of this period. The Germans in their turn borrowed the rounded outline and massive build of the Italian Gothic, which one thinks of as being more suitable to their burly Teutonic figures than the slim and pointed forms that they had developed with such skill in the previous generation. Let us therefore examine the products of these two schools in turn, starting with the Italian armours.

The armour illustrated on pl. LXVIII, fig. 1, no. 316 in the Wallace collection, is commonly accepted as one of the earliest existing armours to show no Gothic feeling in its outline or details. Although it has been compared with the von Barfus armour formerly in the Morgan Williams collection (lot 38 in the sale of 1921, Starkie Gardner, *Foreign Armour in England*, fig. 10), a comparison with the next armours to be described points to the presence of North Italian influence in its make. The very globose breast-plate with triangular turn-over, and the form of the tassets are typical, but the etching upon it is more likely by a German hand, and it is safer to suggest that it comes from one of the Teutonic castles in the valleys of the Alps. Two breast-plates of almost the same form with similar tassets, but without arms, are preserved in the armoury a transitional armour on a tomb in the Franziskaner Kirche at Würzburg, dated 1513. The effigy wears a Gothic sallet with laminated tassets and high neck-guards of early Maximilian style.

¹ 'Dz ist die Rustung zw der Zeit im Tewttschlant gewert.'

² 'Un' armatura bianca fatta a canelini all'Elemanna,' Inventory of the Ducal Armoury at Mantua, 1602.

of the castle of Churburg¹ (pl. LXVIII, figs. 2 and 3), and here we have indisputable evidence of their Italian origin in the style of their etched decoration, which is so conspicuous a feature. It enables us to group round them a whole series of breast-plates similarly ornamented. No. 69 in Count Trapp's catalogue shows a frieze of three medallions containing the Virgin and Child in the centre, St. Francis on the left, and St. Sebastian on the right, and below the protective text *OS NON CHOMINUETIS EX EO*. No. 70 shows the Virgin and Child between St. Sebastian and St. Barbara. The style of this etching is strongly Italian and may be compared with that on some of the *cinquedeas* of the period (pl. LXIX, figs. *c* and *d*), though from the absence of certain characteristic traits it cannot be ascribed to Ercole dei Fideli.² The background of close diagonal shading, the loose, free line lightly indicating the limbs of his subject, are very different from the German style (contrast the etching on the German breast-plate in the Zouche Sale, 1920, lot 201), and the form of the arabesques are typical of Italian Renaissance ornament. The same shaded backgrounds of close-set diagonal lines are found in the prints of the artist-goldsmiths of North Italy at this date, as for instance in 'the Battle of Naked Men' by Antonio Pollaiuolo (1432-98) and in the engravings of Mantegna.

The date when etched ornament was introduced to decorate the polished surface of armour is not certain. The first use of an incised decoration, apart from applied borders of brass, seems to have taken the form of patterns of punched dots, as found on the gauntlets of the late fourteenth-century Italian armour no. 13, and the pauldrons of no. 18, in Count Trapp's catalogue of the Churburg armoury, and M. Pauilhac possesses a Gothic back-plate with Milanese marks enriched with a faint *pointillé* pattern running along the borders of the lames. The first example to be etched with acid appears to be the breast-plate attributed by Schrenck to Bartolommeo Colleoni at Vienna (pl. LXXXIII, fig. 4). It is decorated with a lunette of Abraham's sacrifice and foliated arabesques of a type which we shall have frequent occasion to describe. The form of the breast-plate is quite compatible with the date of Colleoni's later years (he died in 1475), and if the etching is contemporary and not a later addition, it is, we believe, the earliest instance that has come down to us. Although the quality of the etched decoration employed on North Italian armour and weapons of the close of the fifteenth and early years of the sixteenth

¹ *The Armoury of the Castle of Churburg*, by Oswald Graf Trapp, 1929, nos. 69 and 70.

² For an examination of Fideli's style see Ch. Buttin, *La Cinquedea de la Collection de Mme Goldschmidt*, 1906. The date of his birth is unknown, but he was working as a goldsmith at Ferrara in 1487, and about 1500 transferred himself to the Court of Mantua. He died in 1518 or 1519. The signed *cinquedea* of Cesare Borgia in the possession of the Duke of Sermoneta is inscribed with Cesare's title *CAR. VALEN* (Cardinal of Valencia) which enables us to date it between 1492 and 1498, as in the latter year he left the Church to be free to make a political marriage.



a



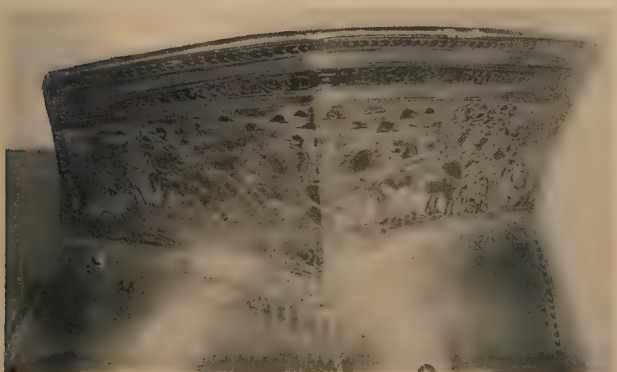
b



c



d



e



f

SPECIMENS OF ETCHING

a. Breast-plate of Missaglia armour, G. 8. Musée de l'Armée. b. Breast-plate of Italian armour, G. 9. Musée de l'Armée. c. Cinquedea etched by Ercole dei Fideli. Wallace collection. d. Cinquedea etched by an unknown artist. Wallace collection. e. Pauldron of armour, G. 7, by Negroli. Musée de l'Armée. f. Detail of etching on German halfsuit. Wallace collection, no. 239

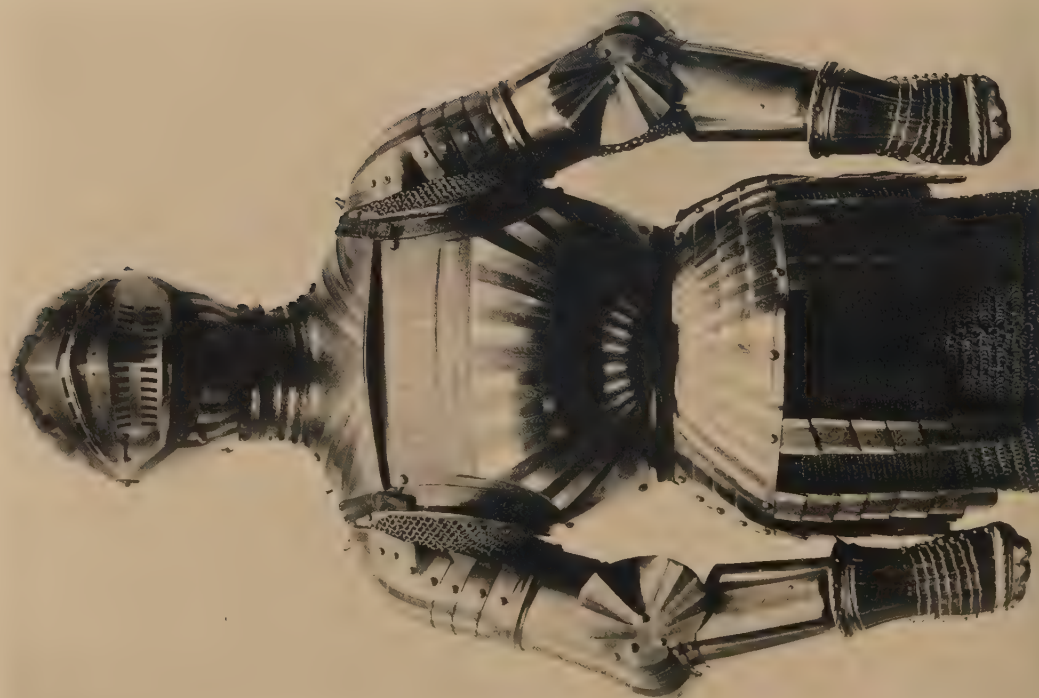


Fig. 1. Armour attributed to Charles de Bourbon, Grand Connétable de France, c. 1510-20. Metropolitan Museum, New York



Fig. 2. Etched Italian fluted armour, c. 1510-20. Musco Civico, Bologna

century varies considerably, revealing the work of several hands, the general style is the same and the repetition of certain ornamental motifs makes it easily recognizable.

An incomplete armour in the Historical Museum at Dresden (pl. LXXI, fig. 2), formerly in the Zschille collection, shows a breast-plate and tassets of precisely similar form to those at Churburg. Across the upper part of the breast runs a frieze containing three compartments divided by Renaissance pillars: in the centre the Annunciation, on the right St. John the Evangelist, and on the left St. John the Baptist, with a scroll inscribed *Ecce Agnus Dei*, and below in Roman letters the same text as on the Churburg breast-plate *HOS NON COMINUETIS EX HEO* (*sic*). Five bands of ornament run from the frieze to the waistline; in the upper part of the three principal ones are panels representing classical personages: Cleopatra, Mucius Scaevola, and Lucretia, with inscriptions in Italian. The rest of the bands are filled with arabesques and strap-work ornament. The same forms of ornament are engraved in bands along the gussets and the borders of all the fifteen plates of the skirt and tassets. From the length of the latter we imagine that the suit was not furnished with pieces for the legs, and was intended to correspond to the light *Trabharnisch* or corselet worn by officers of landsknechts or light horse in Germany.

There is another breast and tassets of this type in the arsenal of Solothurn (Wegeli Cat., no. 2). The etched frieze in this case shows the Virgin and Child between St. Sebastian and St. Barbara, and below, the text *HOS NON COMINUETIS EX EO*, as at Churburg. Lower down on the breast is a representation of the Crucifixion on a vertical band of arabesques. The arms shown with it do not belong, and it lacks the very unusual leaf-shaped culet which survives on the Dresden example. Another early Maximilian half-armour of the Italian type is no. 3 in the same armoury. It shows the Virgin and Child between St. Sebastian and St. Vincent, and the tassets have traces of arabesque ornament, but the lower part of the breast-plate is relieved with fluting, which places it in the next category which we describe.

There are some important fragments of an armour of this kind in the Museo Stibbert (no. 3146), consisting of the front of a gorget, breast- and back-plate, and a rere-brace with elbow cop. All of them are ornamented with etching (in the catalogue they are described as *ornati di finissime incisioni a bulino*, but the blunt ending of the lines more resembles etching than engraving). On the gorget is the motto *UN BEL MORIR TUTA LA VITA ONORA* and a representation of Marcus Curtius plunging into the gulf (a favourite subject on cinquedeas) and the customary arabesques. The breast-plate has a frieze now sadly obliterated, which shows traces of saints (St. Barbara is just discernible) in compartments

divided by Renaissance pillars and the text [OS] NON [COMMINUETIS EX] EO. The lower part of the breast is decorated with two crossed torches and a scroll, the inscription on which is now illegible, but the letters NO. D... OI.... are discernible. The borders of the armpits are etched with arabesques on a shaded background. The back-plate is also decorated with torches and a scroll inscribed NON. D... IO.... The elbow cop, which is well preserved, has a large side-wing, of which the edges and middle ridge are loosely roped, and on either side set upon platforms are nude horsemen, one of whom is overthrowing an opponent on foot. What is particularly interesting is that these horsemen are directly based on two of Leonardo's designs for the equestrian statue of Francesco Sforza, the model for which was destroyed by the French in 1499. They appear in one of the six engravings which were at one time believed to have been executed by Leonardo himself (Passavant, v, p. 181, no. 3), but are now attributed to his school.¹ The rere-brace is decorated with floral arabesques, an astrolabe, and an open book, and an escutcheon inscribed with what appears to be the name NICODE... (Nicodemus), but whether this signifies the owner, the artist, or a patron saint, we cannot say. The bold roping inclines one to place it a little later than the other examples. In the same collection under no. 1031 is an etched pauldron which has belonged to this or a similar suit.

There is a very much obliterated breast-plate of this style in the Burges bequest at the British Museum, and one appeared in the Seymour Lucas sale of 1903 (lot 47). There is, too, a much corroded breast-plate with roped borders in the Zeughaus at Berlin, which also shows faint traces of a frieze of etched medallions across the top, and another in the Tower of London (iii, 76-7) with its back-plate and gorget.

All those that we have described above, with the exception of the second Solothurn one, have smooth, round surfaces devoid of fluting, and in most cases plain angular turn-overs. The breasts are very globose, a feature which a photograph taken from the front does not demonstrate very clearly (fig. 1).

The armour ornamented with *diamanté* embossing in the Bargello (Laking, vol. iv, fig. 1214) presents the same outline and build, and is etched in the same manner. It has a frieze of the Virgin and Child between SS. Sebastian and Barbara on a closely shaded background, and all parts, especially the back-plate, are richly ornamented with foliated arabesques of characteristic form. On the helmet is a hero's head and the motto VICTOR POPULI.

Let us now take another group of armours of the same make and date, but distinguished by having their surfaces relieved with fluting, in some cases

¹ The elbow cop is illustrated in Lensi's catalogue of the Museo Stibbert, pl. CCXXIII. Leonardo worked on this statue for sixteen years and a number of his studies for it are preserved in the Royal Library at Windsor. See L. Courajod, *Léonard de Vinci et la statue de Francesco Sforza*, 1879.

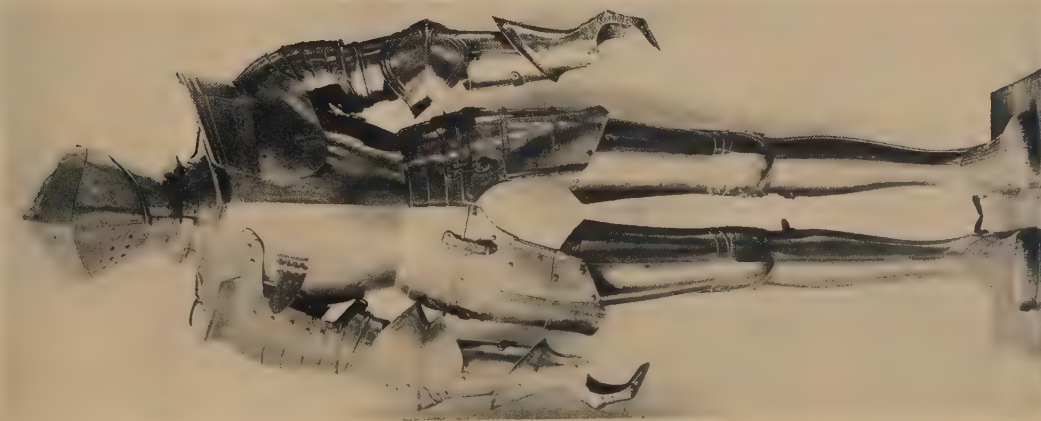


Fig. 1. Milanese armour, by Negroli, c. 1510. Musée de l'Armée, Paris



Fig. 2. North Italian etched breast-plate and tassets, c. 1500. Historical Museum, Dresden



Fig. 3. Armour of Emmanuel the Fortunate, King of Portugal, by Negroli, c. 1510. Paulilhac collection

Published by the Society of Antiquaries of London, 1929



Fig. 1. Saul with the head of Goliath, by Dosso Dossi, Galleria Borghese, Rome



Fig. 2. Admiral Giovanni Moro, by Titian, Kaiser Friedrich Museum, Berlin

light and sparse, and in others very bold and pronounced. As we have already pointed out, fluting had been used in Germany in the fifteenth century. In fact the effigy of Konrad von Weinsberg, †1446, at Schöntal (pl. LXVII, fig. 1) shows a boldly fluted breast-plate of early date, but the fluting on Gothic armours remained an accessory rather than an integral feature of the design, and it is always easily distinguishable from the rigid fluting in parallel lines of the Maximilian period. The Italians do not seem to have adopted the idea until the end of the century, and at first appear to have used it in imitation of the civilian costume of the day. The little 'Marignano' suit in the Doge's Palace at Venice (Cat. Lucia, B. 6) shows a breast-plate with four converging lines of pleat-like ribs like the gathering of a tunic. Another instance is the breast-plate on the composite Gothic armour in the Museo Stibbert at Florence (Cat. Lensi, no. 3910). The employment of a few flutes to give an effect of a textile surface seems to have been but a passing fancy, since within a short time we find them employing fluting for its own sake. We rather doubt the suggestion that it was intended to strengthen armour, as fluted and unfluted suits of the same quality by the same armourers continue side by side to the end of the period, and though it had its uses in assisting the glancing surface to divert an opponent's weapon, it is so often introduced regardless of this function that we imagine its adoption was a matter of individual taste rather than of actual utility.

The first and most important of these fluted and etched Italian armours is that formerly in the Uboldo and de Cosson collections, and now in the Metropolitan Museum, New York (pl. LXX, fig. 1). It has been ascribed to the Connétable Charles de Bourbon on the ground of the resemblance between its decoration and that on his helmet and shield at Vienna, but we understand that latterly the Baron de Cosson was less confident of this ascription. The resemblance may denote the same artist rather than the same patron. Here we have the etched frieze of saints, in this case the Virgin and Child between St. Paul and St. George, and below in Roman letters the text CRISTUS RES (*sic*) VENIT IN PACE ET DEUS HOMO FACTUS ES(T), and on the back-plate the protective one, so often employed on armour, JESUS AUTEM TRANSIENS PER MEDIUM ILLORUM IBAT. The channels of the flutes are filled with typical arabesques. The close helmet shown in the illustration does not belong, but is, we understand, a restoration based on the close helmet on the Medici armour G. 179 in the Musée de l'Armée.



Fig. 1. Profiles of breast-plates nos. 69 and 70 at Churburg.

Another example is preserved in the Museo Civico at Bologna (pl. LXX, fig. 2), and, from a mistaken impression derived from its *bombé* breast-plate, has been mounted on a female dummy. The frieze in this case consists of the sacred monogram between St. Catherine and St. Sebastian, and the spaces between the flutes are filled with foliated arabesques. This armour wears an Italian sallet of Gothic form (cf. Laking, *Record*, ii, figs. 387 and 388), but of Renaissance decoration, and still possesses its rere-braces and fluted tassets. The legs which are mounted with it do not belong.

A third armour of this type is no. G.8 in the Musée de l'Armée (pl. LXIX, fig. *a*), and in this case we have confirmation of our supposition from internal evidence that this group of armour is Milanese, as its sallet with 'Maximilian' bellows visor is stamped with the Missaglia mark. This must, we believe, be one of the last pieces to bear this mark, as the Missaglia workshop appears to have passed about this time into the hands of their relatives the Negroli, whose compass-mark appears on several armours with similar decoration described below. The frieze on the breast-plate shows the Virgin and Child between St. Barbara and St. Margaret (?), who also appear on the elbow-cops, and, below, the prayer MATER DEI MEMENTO MEI, which appears also on armours G. 7 and G. 9. All parts are richly ornamented with flowing arabesques of the usual kind and trophies. The gilding remains in good preservation on the back-plate. The legs with their boxed surfaces should be noted, as the etched armours which we have described above have in all cases been deficient in the lower limbs. G. 9 is similar to G. 8 in general style, but it lacks the legs, and the fluting of the breast-plate takes the form of embossed gadroons. There is no frieze of saints along the top, but the space is filled with a profusion of arabesque foliage etched with a hatched background and containing a hero's head inscribed CHURIO R. (pl. LXIX, fig. *b*).

We now come to a very remarkable armour of this date and make (pl. LXXI, fig. 3) which is in the collection of M. G. Pauilhac at Paris. It bears the compass and initials of Negroli, and the cypher of the armillary sphere used by Emmanuel the Fortunate, King of Portugal (1495-1521), who dispatched Vasco da Gama on his voyage to the Cape. The whole armour is covered with panels etched with mythological subjects and arabesques richly gilt. The upper part and especially the reinforcing breast have suffered from corrosion, but the cuisses still show the delicate Italian etching very clearly, and the whole armour in its outline and make is as fine a specimen of Milanese work of this date as has come down to us. Only the tassets are fluted. The legs are boxed like the Musée de l'Armée suit and also the 'Bayard' suit now in the Tower of London (Laking, iii, fig. 1034 A, and *Archaeologia*, vol. 78, pl. x).

Before we leave these N. Italian armours with etched friezes of saints on the breast it may be interesting to compare several detached breast-plates of this kind. One of very pronounced form has already been exhibited before the Society by Mr. ffoulkes (*Archaeologia*, vol. 78, pl. xiv). Its boldly roped edges and exaggerated flutes have led some to suggest that it is German, but a careful examination reveals traces of a frieze of etching such as we have already described, in this case the Virgin and Child between St. John the Baptist and St. Christopher; and below, barely discernible, are remains of the familiar text OS NON COMMINETIS EX EO and what may be part of a date. It is interesting to place it beside Titian's portrait of the Venetian admiral Giovanni Moro in the Kaiser Friedrich Museum at Berlin, pl. LXXII, fig. 2, which shows an exactly similar breast. There is a second breast-plate of this type, also from the Rotunda at Woolwich and now in the Tower of London, less boldly fluted, and bearing the Virgin and Child between St. Sebastian and St. John the Baptist. In the interesting little museum in the Castle of Valère at Sion is an etched and fluted breast-plate (pl. LXXVI, fig. 2) bearing the arms of its owner, Georges Supersaxo, between St. Sebastian and St. Catherine, and the protective text JESUS AUTEM TRANS(I)ENS P(ER) MEDIUM IL(L)OR(U)M IBAT. Between the rays of flutes are the usual Italian arabesques and trophies, and it so closely resembles the breast-plate of G. 8 in the Musée de l'Armée that we have no hesitation in stating that it is Milanese. Two other breast-plates were in the William Meyrick sale of 1922 (lots 122 and 123), and are now in the collection of Mr. Clarence Mackay in America, both with friezes of saints in the Italian manner, and one of them almost as boldly roped and *bombé* as the Tower example. Another breast-plate in the same sale (lot 111) was etched with the Triumph of St. George, but was so obliterated as to make it impossible to be certain of its nationality, and the fashion of the fluting and the semicircular curve of the neck incline one to believe it to be of German make. Compare also the breast-plate and gorget lent by Mr. Macomber to the Loan Exhibition at New York in 1911 (no. 39 in the catalogue).

It is interesting to follow the choice of Saints used to decorate these armours. St. George has an obvious appeal. St. Sebastian is also a military saint, having been a Roman officer, and according to one account was a native of Milan. His miraculous survival after being shot with arrows at close range may also have suggested that he would enhance the protective virtues of a breast-plate. Similarly, the sight of a representation of St. Christopher was believed to protect one from violent death for the rest of that day, though one would imagine that his portrayal on a breast-plate would be of equal assistance to an opponent. St. Barbara was the patron saint of armourers, a patronage that has since been extended to gunsmiths and artillery in general, while

St. Catherine of Alexandria was ranked as one of the fourteen most helpful saints in heaven.

If we turn for corroboration to the pictures of the day we can find several armours similar to those which we have described, but it is more difficult to find satisfactory representations of contemporary armour among Italian artists than among the German. Michelangelo's and Raphael's preoccupation with the nude, and the tendency of so many Italian artists of the Renaissance to depict warriors, whether saints or gods, *à l'antique*, make good instances rather hard to find. But Dosso Dossi (1479 ?-1542) supplies some valuable examples. His attention to the accurate representation of contemporary armour may possibly date from his sojourn at the court of Mantua, whose ruling house of the Gonzaga supplied so many distinguished generals. The representative of this generation, Giovanni Francesco III, had commanded the allied Italian forces at Fornovo against Charles VIII. Dossi's picture of Saul with the head of Goliath in the Galleria Borghese (pl. LXXII, fig. 1) shows a plain globose armour of the Italian fashion with a frieze of etching across the top of the breast. There is also a version of this composition at Stuttgart. A portrait of a warrior by him in the Uffizi Gallery shows a globose breast-plate with heavy roping along the top and with an etched frieze across the upper part. His portrait of Francesco d'Este as St. George in the Brera Gallery (pl. LXXIII, fig. 2) gives us an excellent instance of armour with smooth globose breast with straight upper edge, and tassets and fluted arms with indications of etched borders. A picture in the church of San Pietro at Modena, ascribed to Rondani (1505-48), representing the Madonna and Child with St. Sebastian and St. Gregory (pl. LXXIII, fig. 1), shows an Italian armour of the early sixteenth century in considerable detail. The fringe of mail below the knee and the greaves ending at the ankle are a favourite Italian feature. The harness is unfluted except for two divergent sprays on the breast, reminiscent of those on the 'Marignano' suit, but even more closely resembling a breast-plate in the Wallace collection (no. 32 A, pl. LXXIII, fig. 3). There is also a breast-plate of this pattern among the armour from Rhodes (which was evacuated in 1522), recently removed from the Rotunda to the Tower of London. There is another picture portraying armour of this type by Dosso Dossi, but with the breast covered with regularly spaced flutes, representing the Virgin and Child between Saint George and Saint Michael, in the Estense Gallery. His picture of the Virgin enthroned between St. Sebastian and St. George in the same gallery shows the latter in an armour with globose breast with a gilt frieze along the top and gilt bands; the pauldrons and arms are fluted, and the cuisses are boxed like those on the Musée de l'Armée suit G. 8. All the details are very carefully rendered. Also we must not forget to mention the portrait of a warrior



Fig. 1. St. Sebastian, from the picture of the Virgin and Child with two saints, by Rondani. Modena, Church of St. Peter



Fig. 2. Francesco d'Este as St. George, by Dosso Dossi. Brera Gallery, Milan

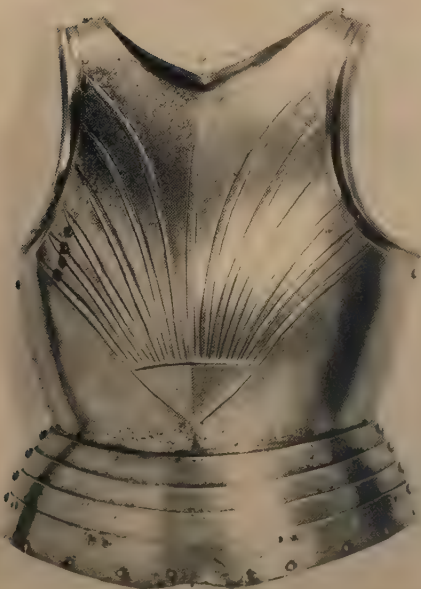
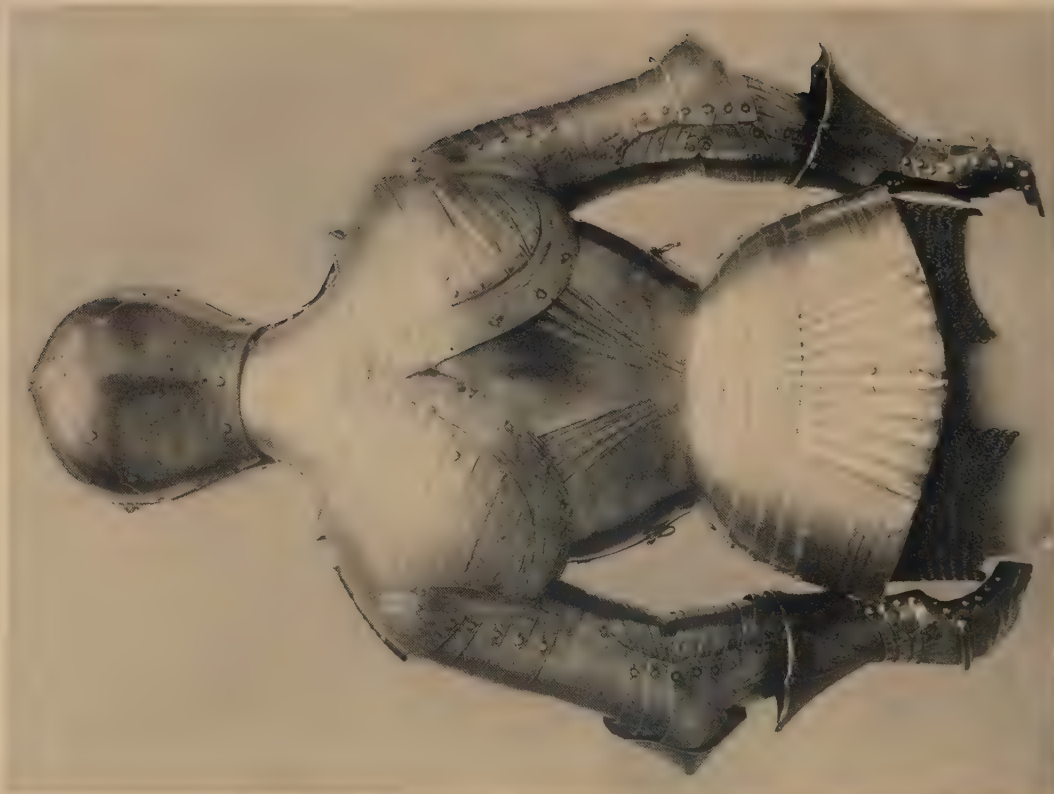


Fig. 3. Breast- and back-plate, probably Italian c. 1500. Wallace collection (nos. 32 and 16)



Early Maximilian armour in the Zeughaus, Berlin, from the armoury of Prince Pless

Published by the Society of Antiquaries of London, 1929

by Piero di Cosimo in the National Gallery (no. 895), which shows a suit boldly fluted on breast, tassets, and arms, so like existing German armours of the period that it is doubtful whether this armour is an Italian one.¹ The picture must have been painted between 1504, the date of the completion of Michelangelo's David, which is seen in the background, and the artist's death in 1521.

Other Italian pictures showing fluted armours are that by Ortolano in the National Gallery (no. 669) worn by St. Demetrius, and the picture of the Virgin and Child between Saints by Garofolo in the Galleria Borghese at Rome, which latter does not, unfortunately, show as much of St. Michael's armour as we should like to see, though the details visible are faithfully rendered. Lastly we must include the finely fluted armour worn by Dossi's St. William at Hampton Court. There are numerous replicas of this picture in existence, one of which was included in the sale of the late S. J. Whawell.²

A third group of Italian armours is well represented in the Musée de l'Armée, but there are few examples elsewhere. They are so distinctive in form that it is possible that they may have been made for French customers during the French occupation of Milan. They differ from the two groups already described in that their breast-plates, instead of being broad and round, are built high in the neck with a central ridge (cf. p. 238 *infra*). G. 7 (pl. LXXI, fig. 1) bears the compass mark of Negroli and is beautifully etched and gilt. G. 36 is another example. It came from the old arsenal at Sedan and is believed to have belonged to Galliot de Genouillac, who was *grand maître de l'artillerie* and fought at Fornovo, Agnadello, Marignano, and Pavia. For his services in this last battle François I^{er} made him *grand écuyer de la couronne*. It is more coarsely etched than G. 7. The cannon and swords included in the decoration of the borders are assumed to refer to these two offices, and if this is the case date the armour as after 1525. The legs are wanting. G. 37 is of the same build, but not etched. It is traditionally ascribed to another soldier of the Italian wars, Robert, Comte de la Marck. G. 42 and G. 47 are later examples of the same group. G. 42 is dated 1538. The Augsburg mark recorded in the catalogue as being stamped on one of the cuisses does not invalidate its Italian origin, as the cuisses are of later date and do not belong to the suit. Both armours have etched and gilt borders of Italian style. G. 10 is somewhat different and was probably made for the Italian market. It bears the compass mark of Negroli, and though incomplete is a most interesting specimen of its kind. It retains its *armet à rondelle* of traditional Italian form, has bears' paw

¹ Lorenz Colman of Augsburg is known to have supplied armour through the merchant-bankers the Fuggers to the Court of Mantua about 1506. He received 4,000 florins for a harness which so delighted his patron that he sent him a bonus of another 4,000 fl.—Bertolotti, *Arti minori alla Corte di Mantova*, 1889, p. 129.

² Others are at Frankfort, Vienna, Paris, Brussels, and Dijon.

sabatons, and possesses some of its double pieces for the tournament. Its parts are etched and gilt in the same style as the other Italian armours which we have been describing. It is interesting to note that all the Negroli armours which we have mentioned, and also the armour no. G. 178 by him for the *champ clos*, are of diverse build, and show the versatility of this famous workshop in catering for varying tastes and requirements. But the style of the etched decoration is similar in each case, employing the same *motifs* and treatment.

The principal helmet worn with these Italian armours was the *armet à rondelle*, which originated in the middle of the fifteenth century, but continued with very little modification well into the sixteenth century.¹ The tomb, now in the Museo Civico of Bologna, of Giovanni d'Antonio Sala, who fell in 1527 fighting on the French side and was buried in the church of S. Domenico (pl. LXXV, fig. 3), shows a plain unfluted armour with upstanding neck-guards and rounded sabatons, and beside him his *armet* with its wrapper, which if it came into the sale-room to-day would unhesitatingly be assigned to the fifteenth century. But the *armet à rondelle* appears in profusion in the woodcuts of Burgkmair and Cranach, and they abound in the interesting picture of the battle of Pavia (1525) in the Ashmolean Museum. Here all the men-at-arms wear armets with wrappers and high double pauldrons on the left shoulder, except one solitary horseman who rides among his fellows wearing a visored sallet of the German fashion of the previous generation.

This survival of the *armet* makes us hesitate to reject without second thoughts the claim of the page's suit in the Doge's Palace to have come from the field of Marignano. Its general outline is still Italian Gothic, but on closer examination it reveals several late features. We have already noticed the pleated breast, but in addition to this the sabatons are square-toed, and the borders of many of the plates, both of *armet* and body armour, are decorated with etching. Other rondel armets to show etching are one in the Wallace collection (no. 83), and four in the Musée de l'Armée (G. 10, H. 54, 55, and 56). H. 55 is German, as among the gilded decoration is faintly discernible a figure of St. William inscribed *S. Will* . . ., and on the other side *S. Forg* and the date 1500. The *armet* on armour A. 75 of Charles V at Madrid still retains in its essentials the form of the Italian *armet* of the fifteenth century.

Beside the *armet à rondelle*, we have already noticed in passing the light type of Italian sallet sometimes worn with these etched armours of the opening years of the sixteenth century. A particularly fine example of this type is the

¹ In the *Histoire du Chevalier Bayard*, chap. xl, there is an interesting account of how he had to divest himself of his *armet* and cuisses, and escape on hands and knees. Later he was concerned by the loss of his *armet*—'*mais il luy faschoit qu'il n'avoit point d'armet. Car en tels affaires faict moult dangereux avoir la tête nue*'—and managed to borrow one.



Fig. 1. Tomb of Wolfgang von Dalberg, d. 1522. Catholic church, Oppenheim



Fig. 2. Tomb of Conrad von Grumbach, d. 1526. Rimpfing



Fig. 3. Tomb of Giovanni d'Antonio Maria Sala, d. 1527. Bologna, Museo Civico

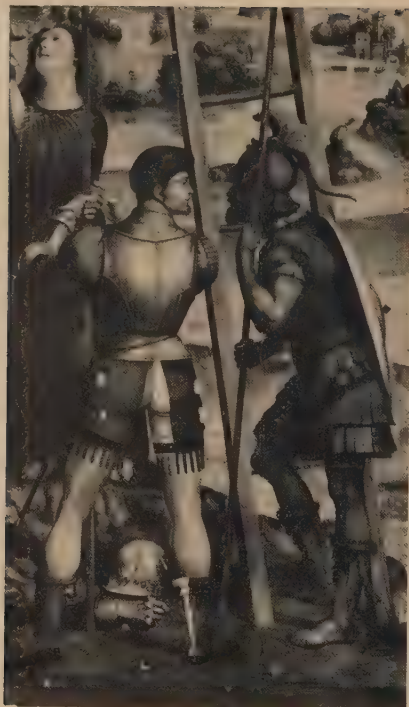


Fig. 1. Detail of the Descent from the Cross, by Sodoma. Sienna. Showing hinged side-pieces to the back.



Fig. 2. Breast-plate of Georges Supersaxo at Sion



Fig. 3. Fluted armour with Seusenhofer mark, and hinged side-pieces to the back-plate. Castle of Churburg



Fig. 4. German etched breast-plate. Burges collection, British Museum

one with the arms of Ercole Bentivoglio (1459-*c.* 1507) preserved in the Hermitage at Leningrad (Laking, vol. ii, fig. 388, and *Z. H. W. K.*, ii, pp. 158-60) which has the extra plate on the brow elegantly fluted and etched with arabesques. Sometimes these Italian sallets are fitted with bellows visors of the German fashion. Examples are in the Wallace collection, the Musée de l'Armée (G. 8, G. 9, and H. 45), in the Carrand collection in Florence, and at Malta, and have been described by Laking, so that we do not need to speak further of them here. Mention, however, should be made of the two superlative Italian sallets covered with elaborate etched arabesques (nos. D. 12 and D. 13) in the Real Armeria at Madrid, both of which appear to belong to the border-line of the fifteenth and sixteenth centuries. Their etched ornament is clearly shown on pl. xx of Count Valencia's catalogue. The arabesques and intricate strap-work have led in the past to their being ascribed to the last Moorish king, Boabdil, but they carry the cross-keys mark of the Missaglia-Negroli atelier and are described in the *Inventario Iluminado* among the '*vejios venido de Flandes*'. They probably therefore belonged to the Archduke Philip, who inherited the Low Countries from his mother and married Joanna of Castile in 1496.

A new form of helmet which introduces itself at this date both in Germany and Italy is the open casque with movable fall on the brow and laminated plates at the back. There is an excellent example, etched in the Italian manner, in the Wallace collection (no. 234, pl. LXXVII, fig. *h*). The same arrangement of laminations at the back is shown on two close-helmets (nos. H. 64 and G. 36) in the Musée de l'Armée. This form of light helmet is important as being the forerunner of the burgonet which became the favourite helmet of landsknechts and light horse.

There is a singular head-piece in the Clemens collection at Cologne (pl. LXXVII, fig. *g*), embossed apparently to represent the light caps, sometimes shown on portraits of the day, and worn as a padded foundation for a helmet. It is elegantly etched with arabesque foliage in the Italian style. We only know of one other instance of this kind of head-piece.¹ This is in the Germanisches Museum at Nürnberg, but is of very rough make and we think of doubtful authenticity.

If we go northwards to observe the new fashions of armour adopted in the meantime by the great centres of the craft in S. Germany and Tyrol, Augsburg, Nürnberg, and Innsbruck, we can trace the evolution of the German 'Maximilian' armour from the point where it abandoned Gothic slimness and angularity and adopted the rounded outlines of Italy. It is doubtful whether Maximilian himself had much to do with this change, but it is his own representation by Hans Burgkmair the Elder in his woodcut of the

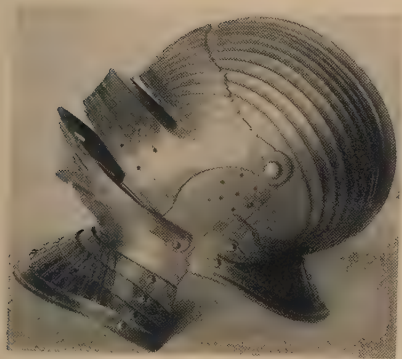
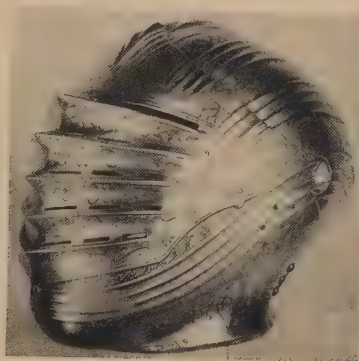
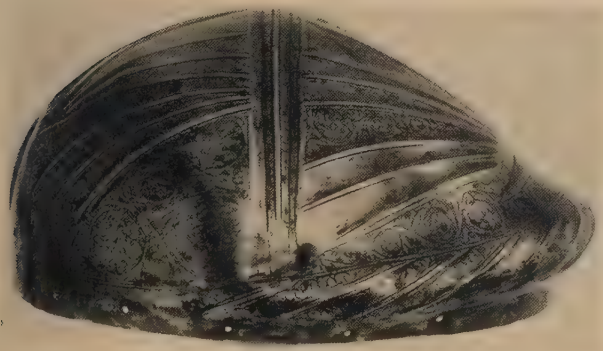
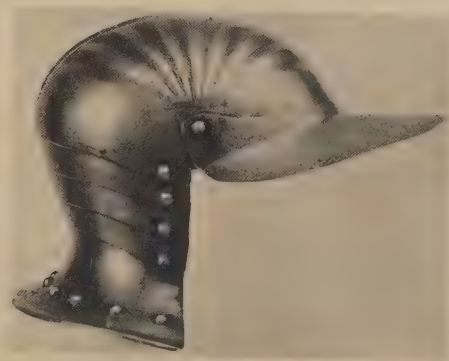
¹ But compare the steel cap D. 23 in the Real Armeria at Madrid.

Emperor as first issued in 1508 (fig. 20, p. 26 *supra*) which gives us our first representation of a German 'Maximilian' armour. He also appears clad in the new fashion on his treble thaler struck in 1509, which shows him armed at all points on a barded horse (pl. LXXXIII, fig. 1), and on the thaler without a date, but probably struck in 1508, in which he is shown half-length in an armour with fluted breast-plate.¹ There is no lack of material for tracing the course of German armour from this date onwards. It is represented in most armouries, and the activity of the German artists in this great period of their art has left us countless illustrations in paintings, engravings, and sculptured tombs.

The Zeughaus at Berlin has recently acquired from the armoury of the Prince Pless a very rare specimen of an early Maximilian half-armour² (pl. LXXIV). The fluting is still a subordinate feature and is used to enhance the graceful lines of its build, as was the case with the later Gothic armours. The pleat-like gathering of the flutes on back-plate and culet and the heart-shaped piercings are still pure Gothic in style. It bears no mark, but belongs to the same family as the later armours of Maximilian at Vienna which we have already described (p. 220). The armet is of unusual form. Instead of opening down the chin in front, the bevor swings open on a hinge fixed on the left side (cf. G. 5 in the Musée de l'Armée). The lower edge fits over and revolves on the upper rim of the gorget. Along the top of the breast in Roman capitals are the letters N M N N, which Dr. Binder suggests stand for *Non Nobis, Maria, Non Nobis*. The protection of the inner side of the elbow with a series of narrow lames first appears on Maximilian's Colman suit no. 62 of 1493, and is not uncommon on armours of the early sixteenth century. It seems to disappear entirely in the second half of the century only to reappear on some of the armours of the seventeenth century. The left pauldron alone shows an early instance of the upstanding neck-guards which later become so conspicuous a feature of Maximilian armours, and it should be compared with the Wallace collection armour no. 316 of similar date (pl. LXVIII, fig. 1). The employment of zig-zag embossing on the back of the pauldrons, at the top of the shoulders, and on the vambraces is also found on Maximilian's armours nos. 7 and 67 at

¹ It is worth noting that his thaler struck in 1505 showed him still wearing a cusped placate of Gothic form. Peter Vischer's famous tomb of Hermann VIII von Henneberg at Römheld is believed to have been cast about 1508, after the death of his wife in 1507, as the date of the Graf's decease has clearly been filled in at a later date by an unskilful hand. It shows an early fluted armour of 'Maximilian' form with a rondel armet. Vischer's earlier tombs at Cracow show unfluted armour with round sabatons, but are still in the main Gothic. That of Marshal Kmitas, †1505, shows a fine Gothic sallet.

² It has been made the subject of an article in *Berichte aus den Preussischen Kunstsammlungen*, 1929, pp. 75-9, by Dr. Binder, Director of the Zeughaus, to whose courtesy I owe the photographs.

*a**b**c**d**e**f**g**h*

a-f. THE DEVELOPMENT OF THE FLUTED BELLOWS HELMET

a, b, c. German sallets, c. 1490-1510. Wallace collection. *d.* Sallet, c. 1510. Kunsthistorisches Museum, Vienna. *e.* German etched 'bellows' helmet. Musée de l'Armée, H. 61. *f.* Italian etched bellows helmet. Musée de l'Armée, G. 36. *g.* North Italian steel cap. Clemens collection, Cologne. *h.* North Italian etched casque. Wallace collection (no. 234)

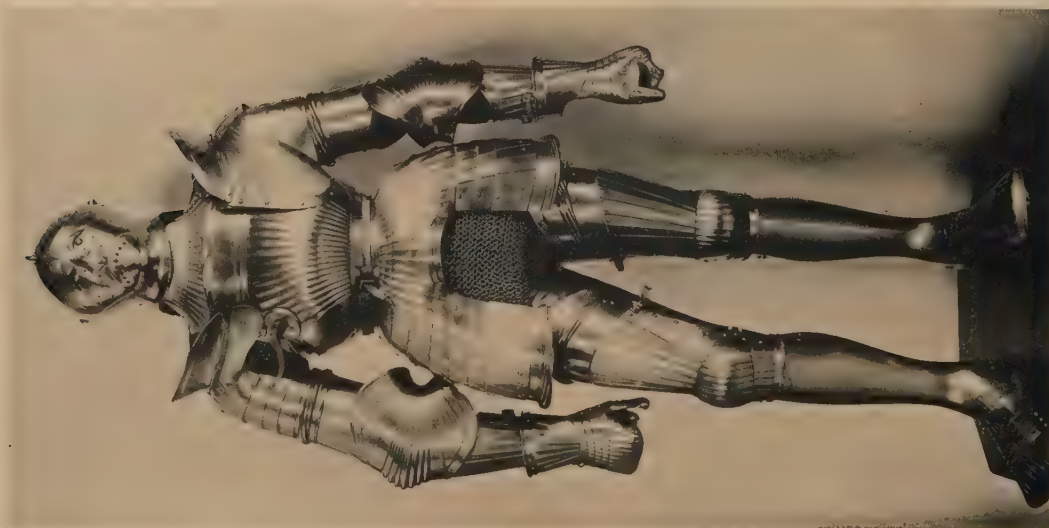


Fig. 1. Fluted armour with grotesque visor. c. 1520. Kunsthistorisches Museum, Vienna (no. 128)

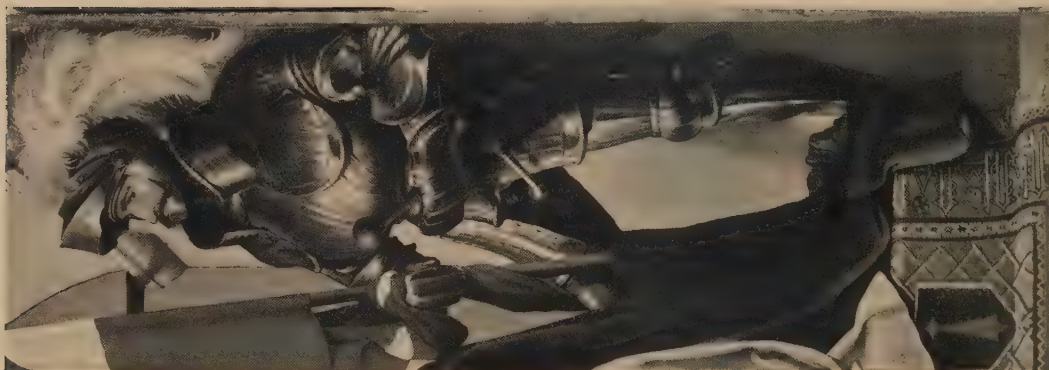


Fig. 2. St. Ursus, from the picture of the Virgin and Saints, by Hans Holbein the Younger, painted in 1522. Solothurn

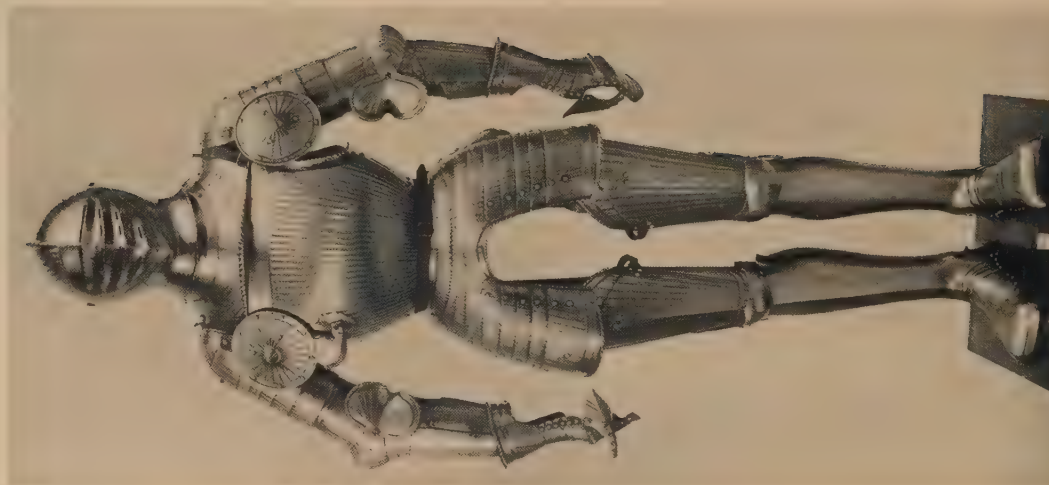


Fig. 3. Fluted German armour, c. 1520. Wallace collection (no. 763)

Vienna, and, among other instances of the same date, on the tassets of the Seusenhofer early Maximilian armour no. 71 at Churburg.

The earlier Maximilian armours show fluting of a less pronounced kind than the later ones. The ribs are often few in number or gathered into groups, and the surface between is flat. In the later armours the flutes are usually sharper and the spaces between channelled to a concave section. The more boldly fluted style seems to have come in about 1520, and the other form seems to have survived for some time beside it. There may have been many who preferred the simpler style, and probably the more flamboyant armours covered with deep fluting and heavily roped at the edges were more expensive.

Fluted armours are termed *geriffelt* in the inventory of the Ambras collection drawn up in 1596. The contemporary Italian name was *armatura spigolata* (inventory of the armoury of the Castle of Mantua of 1542¹) and the English word appears to have been 'crested'.²

Many German tombs between 1510 and 1525 (e.g. pl. LXXV, fig. 1) show armours with plain surfaces and sparse flutes.³ The breast-plate on the composite Maximilian armour II. 12 in the Tower of London is a good example of this early form, and the turn-overs are angular and plain. The armour with the Seusenhofer mark (pl. LXXVI, fig. 3) in the Churburg Armoury (no. 71, cf. also no. 72) is an early instance of German fluted armour and has an interesting feature in the make of the back-plate, which has two side-plates under the arms hinged to the main part of the back. A Gothic armour by Conrad Seusenhofer in the same armoury (no. 31) shows a similar feature on the back-plate, so that the Churburg Maximilian suit is probably an early one. Count Trapp points out that this feature is also found on a Maximilian back-plate in the Zeughaus at Berlin from the Bernau Armoury (*Z. H. W. K.*, vol. xi, p. 100), and we can illustrate it very felicitously by a detail from a picture by Sodoma (pl. LXXVI, fig. 1) of the Descent from the Cross in the Siena Gallery.

When describing the fluted armours which are so typical of the Maximilian school in Germany, it must not be forgotten that armours of exactly similar build but with smooth surfaces (compare the armours of Eitel Friedrich, Graf von Zollern, and Andreas, Graf von Sonnenburg, at Vienna) were being turned out at the same time. In the collection of armour now assembled in the

¹ Angellucci, *Turin Cat.*, 1890, p. 37. See also footnote 2 on p. 221.

² de Cosson, *Cat. of Tudor Exhibition*, 1890, p. 162.

³ We have already mentioned the Römheld example of 1508. The Oppenheim tomb is dated 1522, and there are even later examples of tombs with sparse fluting. The picture by Matthias Grünewald at Munich of St. Maurice and St. Erasmus shows the latter in a Maximilian armour with high neck-guards and sparse fluting. It was painted to the order of the elector of Mainz for the church of St. Maurice and St. Magdalen, which he built at Halle in 1518.

castle of Ambras¹ at Innsbruck there are several German armours of this date, but not one of them is fluted.

Throughout the twenty or thirty years during which the Maximilian style flourished in Germany we find certain alternative forms, which do not seem to have been a matter of date so much as a matter of personal preference. For instance, the large pauldrons overlapping the armpits, back and front (pl. LXXVIII, fig. 1), were employed at the same time as the smaller laminated defences of the shoulder (pls. LXXVIII, fig. 3, and LXXX, fig. 1) worn with a pair of besagues. The large enveloping elbow-cop (pl. LXXVIII, fig. 1) along with the smaller kind consisting of a cop with side-wing (pl. LXXVIII, fig. 3). The favourite form of close-helmet throughout the period was that with 'bellows' visor. It is this type which Maximilian is shown wearing on the Burgkmair woodcut of 1508 and it lasted down to the 'thirties. The earlier close-helmets are those with two cheek-plates hinged at the sides and meeting at the chin, in the same way as the Italian *armet à rondelle*.² These often have a circular flange at the bottom which revolves on the upper rim of the gorget. Later on it was found more practical to model the bevor in one piece and pivot it on the same points as the visor, although many first-class armourers preferred to continue in the older fashion, and several of the earlier Greenwich helmets are still made to open down the chin. The later helmets usually have a number of articulated plates at the back of the neck, and the weight of the helmet was borne by the head. Though oppressive this was probably more comfortable than being imprisoned in a helmet which was locked to the gorget, and which would become immovable if the flange was bent by a violent blow.

Other forms of Maximilian visor are the so-called 'monkey-face' or boxed type (pl. LXXX, fig. 1),³ and the 'sparrow-beak' or pointed form (pl. LXXVIII, fig. 2). In nearly all Maximilian helmets the visor is in one piece, whether bellows, monkey-faced, or pointed, with the sight provided by a pair of horizontal slits in the upper part. Towards the end of the period a visor in two parts was introduced, in which the upper part containing the sight moved independently on the same pivots as the face-guard. This became the usual form of the close-helmet for the rest of the sixteenth century. The Italian armour G. 7

¹ Not to be confused with the original Ambras collection of the Archduke Ferdinand, which is now at Vienna.

² Graf Trapp in his catalogue of the Churburg Armoury under no. 66 describes a remarkable *armet* of about 1500, probably made at Innsbruck: it retains the pendent labels which are illustrated in Freydal and on the Valenciennes tapestry. It is complete with its wrapper, is of the finest workmanship, and in perfect preservation.

³ The late Baron de Cosson suggested that the bellows form was a feature of Nürnberg make, and that the 'monkey-face' type was favoured by Augsburg, but the monkey-face helmet on Armour II. 2 in the Tower of London bears the Nürnberg mark.

in the Musée de l'Armée, the fluted and engraved armour dated 1530 in the collection of Prince Odescalchi (Cripps-Day, *Armour Sales*, fig. 22) and the Rogendorf armour at Vienna already show this innovation. Helmets with grotesque visors imitating a moustachioed human face are not uncommon, and in the large royal armouries such as that at Madrid where the 'double' pieces of suits have been preserved, we find different forms of visor which could be fitted to the same helmet as required.

How the sallet gradually gave way to the close-helmet is illustrated on pl. LXXVII, figs. *a-g*, by a series of German helmets of the early years of the sixteenth century in the Wallace collection and including a helmet at Vienna, which though of sallet form has the bevor pivoted to it at the sides.

The picture of the Virgin and Child with St. Martin and St. Ursus by Holbein at Solothurn (pl. LXXVIII, fig. 2), painted by him in the year 1522, shows a fine upstanding armour with high neck-guards on the pauldrons which is typical of this date. The exuberance of the craftsman found expression in the 'twenties and 'thirties in building harnesses of great magnificence, the borders roped and double-roped, and the fluting deeply channelled and engraved. The late Mr. S. J. Whawell purchased a very fine example at the sale of the collection of Sir Archibald Lamb¹ in 1922. It is now in the Metropolitan Museum of New York, and instances are to be found in most of the larger continental collections, especially at Vienna and Paris, each of which possesses a numerous series of German armours of the Maximilian fashion.

The tomb of one of the von Handschusheim family, †1519, in the little church of Handschusheim near Heidelberg, shows a particularly faithful representation of a fluted armour of this date. The sculptor has carefully rendered every strap and buckle in the white limestone in which it is carved. I very much regret that I have so far been unable to obtain a photograph of this tomb, and so reproduce instead (pl. LXXV, fig. 2) a photograph of the tomb of Conrad von Grumbach, †1526, in the church at Rimpar.

The flourishing state of the art of engraving in wood and on copper which marked this epoch in South Germany is reflected in the armour of the time. It soon developed a style quite distinct from the Italian. It is deeper and bolder, and the patterns are carried out with greater precision and without the lighter and sketchier touch of the early Italian engravers. The Germans seldom used a background of close-set, diagonal lines, but preferred one of raised dots, which later became universal. The socket of no. G. 356 in the Musée de l'Armée is a good example of German decoration (see also pl. LXIX, *f*). We have already mentioned a smooth globose breast-plate formerly in the Zouche collection (Sale Cat. of 1920, lot 201) engraved with the Virgin and

¹ Cripps-Day, *Armour Sales*, 1884-1924, p. 250.

Child, St. George and St. Christopher, and some of the fluted armours are beautifully adorned in this way. The half-armour no. 239-40 in the Wallace collection is richly etched with bands of ornament containing classical deities, flowers, trophies, and masks (pl. LXIX, *f*), and the breast-plate in the Burges bequest at the British Museum (pl. LXXVI, fig. 4) shows how very effective this form of decoration could be. We can place beside it a portrait of a warrior by the Master L. S. in the Kaiser Friedrich Museum. The date 1527¹ is inscribed on the gorget, and the artist has spared no pains to make his picture as much a portrait of the armour as of the wearer (pl. LXXIX, fig. 2).

There is a richly fluted, engraved, and roped armour in the collection of Prince Odescalchi, and formerly in that of Edwin Brett (Cripps-Day, *Armour Sales*, fig. 22), which bears the date 1530 and the initials 'G. T.', but whether these are the owner's or the engraver's we cannot say. It is unfortunate that the engravers of armour at this date so rarely signed their work, as many of the existing specimens must come from the hand of artists such as Aldegrevier, Burgkmair, Cranach, Glockenton, Solis, and Flötner, who are well known to us by their prints. The etching on the armour of Conrad von Bemelberg at Vienna is signed by Abraham Glockenton. The armour of Johann Friedrich, duke of Saxony (no. 196), bears initials attributed to Matthias Gerung, and an etched *manteau d'armes* on one of the armours of Charles V at Madrid bears the signature of the artist Daniel Hopfer of Augsburg and the date 1536, which show that armourers did not hesitate to 'put out' their work to be etched by the best practitioners of the art, and that it was not always etched in the shop, as many writers have assumed.²

Another good portrait of an armour of this time, and a particularly florid example, is one painted in 1520, of Joachim, Margrave of Brandenburg, in the Castle at Dessau (pl. LXXIX, fig. 1). The young prince is shown at the age of sixteen wearing a fluted armour with high neck-guards, the borders boldly roped, and the arms further embellished by puffed rings. It is of the school of Lucas Cranach, who is known to have lived at one time in the house of the Colman family of armourers at Augsburg. His prints of the Tournament (Bartsch

¹ The practice of engraving the date on an armour was introduced in our period, and is most useful when it occurs. Besides the Genouillac and other armours mentioned in our text, the following are also dated: Vienna no. 141 Otto Heinrich von der Pfalz 1523, no. 200 Fr. Graf von Fürstenberg 1531, no. 330 Fr. Maria della Rovere 1532 (by Negrolì), no. 197 Ph. Landgraf v. Hesse 1534; Madrid no. A 108, 1531; Nürnberg, plain half-armour with arms of Steinau 1522; Musée de l'Armée no. G. 179, I. dei Medici 1515; no. G. 40 Bavarian armour 1533; Wallace collection, no. 851 Bavarian armour 1532.

² Other armours at Vienna which are signed, but by engravers at present unidentified are: no. 69 Louis of Hungary, signed 'E. S.', no. 141 Otto Heinrich von der Pfalz 'H' on one pauldron and 'M' on the culet, no. 64 Georg von Püchheim 'I. A.', no. 68 Federico Gonzaga 'A. T.' and 'M'.



Fig. 2. Portrait of a warrior, by the Master L. S., 1527.
Kaiser Friedrich Museum, Berlin



Fig. 1. Portrait of Joachim, Margrave of Brandenburg, 1520,
at the age of 16. Dessau

Published by the Society of Antiquaries of London, 1929



Fig. 1. Fluted armour, c. 1515,
with 'monkey-faced' helmet.
Kunsthistorisches Museum,
Vienna (no. 132)



Fig. 2. Late fluted armour,
c. 1560. Kunsthistorisches
Museum, Vienna (no. 339)



Fig. 3. Detail of the Judgement of Paris,
by Lucas Cranach. Carlsruhe.



Fig. 4. Fluted and embossed armour,
c. 1535. Historical Museum, Dresden

126 and 127) and St. George (B. 64) are well known to all armour students. Another picture of his school is illustrated on pl. LXXX, fig. 3, and represents the Judgement of Paris. Our plate is reproduced from the picture at Carlsruhe, but the subject seems to have been a favourite one with the artist's patrons, as there are versions at Copenhagen, Darmstadt, and Gotha, and another was recently bought in Holland for the Metropolitan Museum. The composition was first used by the elder Cranach in his woodcut of 1508 (Bartsch 114), but we imagine that the picture dates from the early 'thirties. In the woodcut Paris wears unfluted armour of the same kind as Cranach's print of St. George of 1509, and the elaborately fluted and roped armour of the picture is clearly much later.

In later Maximilian armours we sometimes find the bands of flutes separated by rows of embossed scales. On pl. LXXX, fig. 4, we illustrate an example in the Historical Museum at Dresden, and there was a three-quarter harness with this kind of decoration in the collection of the Marquis of Breadalbane and now in that of Mr. R. L. Scott. The last and final form of fluting is exemplified on an armour of about 1560 at Vienna (pl. LXXX, fig. 2) in which the flutes are so narrow and so closely set that they are hardly visible in the photograph. It is here a mere mechanical reminiscence of its prototype.

German tombs continue to show fluted armour until after the middle of the century. The tomb of Götz von Berschlingen, †1562, in the church of Schöntal, shows him kneeling in a fluted harness of late fashion, but we believe that very few existing fluted armours were made after 1540. For some time the Maximilian fashion had had to compete with the increasing popularity of the 'Spanish'¹ and 'landsknecht' styles, to give them the names under which Laking has classified them. The 'Saxon' or Brunswick type had also appeared by 1540. There is a group of fluted armours, which from the presence of placates or divided breast-plates might be thought to be of early date, but they betray the end of the Maximilian style in several particulars. Their placates are pierced at the top with the double eagle, the fluting is close set and evenly distributed over the whole surface, and the breast-plates are no longer globose but have a pointed ridge down the middle like the Saxon armours. Two are in the Wallace collection (nos. 353 and 779), and there are others in the Landesmuseum at Zurich and at Copenhagen. The two examples in the Wallace collection have Nürnberg marks.

Contemporary with the heavier armours, which we have been describing, were the light landsknecht armours or 'Almayne rivets' which were worn by the infantry and light cavalry, and which the leaders did not disdain to use. The armour of that redoubtable leader of landsknechts, Georg von

¹ Such as the Churburg armour no. 97, which from internal evidence was probably built shortly after 1529.

Freundsberg, †1527, preserved at Vienna, shows a plain half-armour of this type. Heinrich der Fromme, Duke of Saxony, is shown even more lightly armed in a portrait by Lucas Cranach at Dresden, which shows him standing in a large mail 'bishop's mantle' grasping a two-handed sword.

The output of the German centres of the craft must have been enormous during our period. Not only had they to supply their own armies fighting in Germany, the Low Countries, and Italy, but they exported armour in large quantities to foreign buyers, and Henry VIII brought over German craftsmen in 1511 to found his workshop at Greenwich. Hitherto the English taste had inclined towards the Milanese style, but in the first part of the sixteenth century we have records of Henry VIII and Cardinal Wolsey continually purchasing large quantities of 'Almayne rivets'. The number of harnesses of this date which bear the Nürnberg mark far outnumber the productions of any other workshop in museums to-day.

If we look round the countries outside Germany and Italy we find that the taste for fluted armour was by no means universal. The armours which Charles V ordered from his German and Italian armourers and which are now preserved in the Real Armeria at Madrid show very little fluting. Some of them have vertical bands or ribs which give a suggestion of fluting (nos. A. 49, 93, 129, and 116), but of actual embossed fluting in the German manner there is none. The armour of Emmanuel of Portugal, which we have already described among the early etched Italian armours, is the only armour that we know of connected with the Peninsula which is definitely fluted.

It is more difficult to speak of French taste in this matter. We have very little knowledge of French native-made armour, and one presumes that, as for part of this period the French were in occupation of Milan, those who were on the spot, or those at home who could afford it, made full use of the skill of the Milanese master-craftsmen. We have already described a series of armours in the Musée de l'Armée of Italian make, including that of Galliot de Genouillac, which we believe were intended for French patrons. If we examine the tombs, paintings, and tapestries in France we find little evidence of the fluted fashion. Contemporary monuments such as the tomb of Imbert de Bastarnay and his son at Montrésor (with a superb rondel armet), attributed to Jean Goujon, show plain armour worn with heraldic tabards. The tapestries in the Musée Cluny of the time of Louis XII representing the History of David and Bathsheba, and that at Padua (pl. LXXXI) of Flemish manufacture, show armour in great detail, but the surfaces are smooth and unfluted. The breast-plates are high in the neck with central ridges like the Franco-Italian group of armours described on p. 229. That the weavers could render fluting with great effect when they wished is exemplified by a tapestry in the National Museum at Copenhagen which



Flemish tapestry, early sixteenth century. Museo Municipale, Padua
Published by the Society of Antiquaries of London, 1929



Fig. 1. St. George and the Dragon, by Leonhard Beck. Kunsthistorisches Museum, Vienna

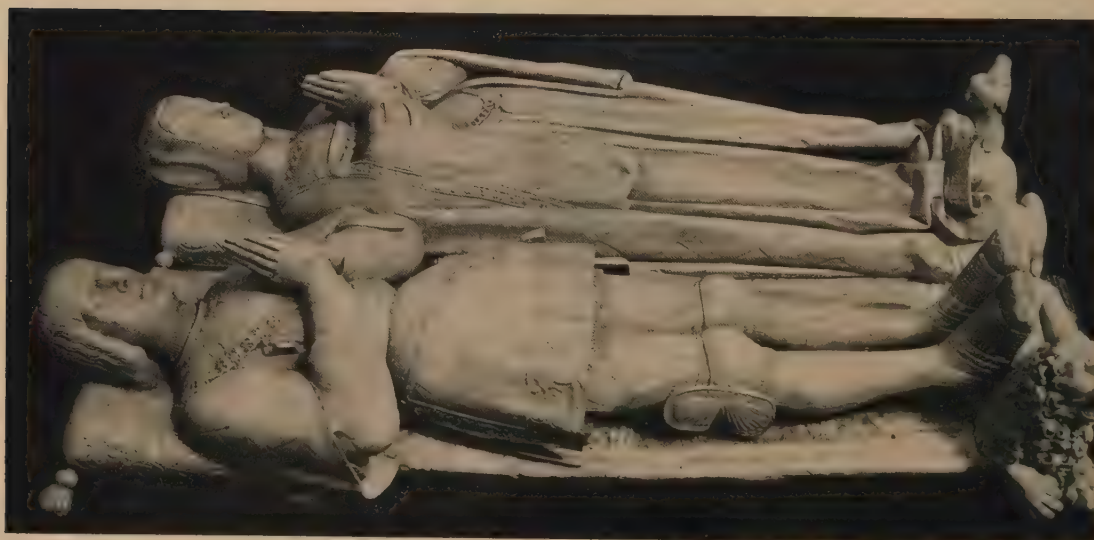


Fig. 2. Tomb of Antoine de Lallaing and his wife. Hoogstraeten

Published by the Society of Antiquaries of London, 1929

shows Christian III in a fluted German harness in great detail. A second and very complete armour ascribed to de Genouillac, formerly in the possession of the Duchesse d'Uzès and now in the Metropolitan Museum, New York, may be of French workmanship, if it is not Italian (Laking, vol. iii, fig. 1021, but date wrongly given). It is dated 1527 and completely covered with etched and gilt ornament, but is devoid of fluting. We have already mentioned the so-called Bayard armour among the Italian school. Its appearance is rather impaired by its breast-plate, which almost certainly does not belong to it. Certain details of its build invite comparison with armours G. 11 and G. 12 in the Musée de l'Armée, and similar narrow bands of shallow roping or piping are found on G. 131.

The tomb of Anthoine de Lallaing at Hoogstratten in Belgium (pl. LXXII, fig. 2) shows that German influence had penetrated as far as the Low Countries, as his cuisses are fluted in the true Maximilian style.

In England we find the same reluctance to adopt a fashion which was paramount in Germany and not uncommon in Italy. English effigies and brasses of the time show very little of it, and the armours of Henry VIII in the Tower of London are quite unfluted except no. II. 7, which is probably Milanese like its helmet.

Up to this time the rich series of English brasses and monuments supply a most valuable history of defensive armour, but in the sixteenth century a serious falling off in artistic quality sets in and with it we lose a certain amount of confidence in the accuracy of the artist's representation of military equipment. The brasses from about 1490 to 1550 show an almost mechanical repetition of armours of a debased Gothic form. Placates and pointed tassets of a single plate ('tuiles') continue, and upstanding neck-guards and broad round-toed sabatons are almost the only concessions to contemporary fashion. We give as an example that of Sir Thomas Brooke, Lord Cobham, †1529 (pl. LXXXIII, fig. 3), one from many of this type. Fluting only appears occasionally in the form of a spray on the placate. The effigies in stone similarly show late Gothic forms continuing far into the century.¹ Whether this conservatism is due to the sculptors, or to the faithfulness of the English squires to local fashions, we cannot say. But Henry himself saw to it that his armour came from the finest foreign workshops. His suit with steel bases by Conrad Seusenhofer (II. 5) was a present from the Emperor Maximilian, his armour for the

¹ Among others one might mention the effigies of Sir John Spencer, †1522, at Great Brington (Crossley, *English Church Monuments*, p. 221), Sir W. Smythe, †1525, at Elford (*ibid.*, p. 224), and compare also pls. XLVI-LIII in Mr. Gardner's article on 'English Alabaster Tombs' in *Arch. Journal*, vol. lxxx. The effigy of Sir John Peche, †1522 (Stothard, pl. 142), is an exception in that it shows fluted and laminated tassets.

champ clos (II. 6) is probably of Milanese make, judging from its close resemblance to Italian armours of the same kind in the Musée de l'Armée G. 178 and 179, and his tonlet suit II. 7 also. But his two armours made in his later years, one of which is at Windsor and one in the Tower (II. 9), are probably from his own workshop at Greenwich. Holbein's fine portrait of Sir Nicholas Carew, in the possession of the Duke of Buccleuch, painted between 1526 and 1528,¹ shows an unfluted armour very similar in outline to the two last-mentioned armours of Henry VIII, and like them is probably of Greenwich make.

We have one instance, however, of a fluted armour on an English tomb, and that is the monument to John de Vere, fifteenth Earl of Oxford, †1539, in the church of Castle Hedingham, Essex.² It is sculptured in relief on a slab of grey touch, and is quite unlike any other English monument with which we are acquainted. Even his greaves are fluted, a feature very rare on fluted armours, which almost invariably have the greaves alone left plain.³ The tomb of Lord Williams, †1559, in the centre of the chancel of Thame church, Oxfordshire, shows him in a rich suit with certain details such as the toes of his sabatons and the wings of his elbow-cops decorated with fluting. With the exception of Henry VIII's armours only a few fragments of actual English armour of this date have come down to us. The helm of Sir Giles Capel was not of course intended for the field, and the same applies to the other English helmets of this date which have been preserved in churches. The fine armet which once belonged to Mr. Seymour Lucas and is now in the collection of Sir Edward Barry (Laking, vol. ii, fig. 445 E) has been assumed to be English, and though this is not proved we should like to think so. The town armour in the church at Mendlesham in Suffolk includes a fluted breast-plate, and two breast-plates dug up at Settle in Yorkshire and now in the possession of Mr. Cripps-Day also belong to our period, but they resemble the rougher continental types too closely for us to lay down that they are of English make, and it is more likely that they formed part of the large importations of 'Almayne rivets'.⁴

¹ Paul Ganz, *Klassiker der Kunst* Series, Holbein, p. 77.

² Illustrated in R. C. on Hist. Mons. Essex, vol. i, p. 50.

³ Hall's chronicle (1904 edition, vol. i, p. 65) states that Henry VIII when he landed at Calais in 1513 'was appareilled in almaine ryvet crested and his vanbrace of the same, and on his hedde a chapeau montabyn with a rich coronal', and *ibid.*, vol. ii, p. 288, 1539, 'the Lord Maier himself was in a fayre Armour, the crests thereof were gilt'.

⁴ Henry VIII was buying armour in Italy in 1510 (Cal. of State Papers, no. 434) and in Flanders in December of the same year (*ibid.*, no. 635). In 1512 Wolsey and John Daunce made an agreement with Guido Portynari, merchant of Florence, for the delivery of '2,000 complete harness called Almayne rivets according to a pattern in the hands of John Dauncy, accounting always a salet, a gorjet, a breastplate, a backplate and a pair of splints' at sixteen shillings the set (*ibid.*, no. 1382).

In our rapid survey of Maximilian armour we have deliberately omitted the fantastic puffed and slashed parade-armours imitating the civilian fashion of the day which had a short vogue in court circles between about 1510 and 1522. Examples are to be seen at Vienna, Paris, Berlin, Berne, Stockholm, the Wallace collection, and the Metropolitan Museum, New York. That the armour was never intended for any serious purpose is shown by the fact that sometimes it is pierced with round holes between the puffs to lighten it. Arms puffed and pierced in this way are in the Instituto del Conde Valencia at Madrid, and in the collections of the duke of Infantado, the duke of Alva, and M. Pauilhac. In Spain this type of 'masking' armour was called *armadura triunfale*.

It remains to say a word about horse-armour. Gothic horse-armours are of extreme rarity. Apart from chanfrons and detached pieces, we only know of three, those at Paris, in the Wallace collection, and in the Museo Stibbert (this last is composite and much of it may be of later date and might almost be included in our period). But when we come to Maximilian bards we have numerous examples for study. The temptation to sacrifice mobility to variety, which was so marked a feature of the middle ages, does not seem to have been affected by the grimly serious spirit in which the Italian wars were conducted, for the caparisoning of the horse at this date was of great richness. Its crest was plumed, and the bards covered with textiles, and if of leather or parchment gaily painted.¹ These light, painted bards must have been very numerous in their day. In the *Historie du Chevalier Bayard*, Chapter L, we read that '*Raymon de Cardonne, Visroy de Naples . . . avoit en sa compagnie douze ou quatorze cent hommes d'armes, dont les huit cent estoient bardes*'. Hall constantly delights in describing magnificent bards in his picturesque chronicle. He also relates how at the Battle of the Spurs the French men-at-arms 'fled and threwe away their speres, swerdes and mases and cut of the bardes of their horses to run lighter'.

Under the same year Sanuto records a purchase by Henry of 12,000 suits of armour from 'certain staplers' (*ibid.*, no. 1385), and Wolsey and John Daunce purchased through Robert Bolte of London, mercer, 3,000 harnesses at sixteen shillings (*ibid.*, no. 1385). In 1513 there is recorded an indenture with John Cavalcanti, 'merchant stranger' for 1,700 'complete armours for footmen' (*ibid.*, no. 1920), and in 1514 we find Edward Gylleford, master of the armouries, purchasing 100 Milan harnesses from Guido Portinari (*ibid.*, no. 2843). There are further entries too numerous to mention.

¹ Gay in his *Glossaire Archéologique* quotes a very full description of the painting of a bard taken from an inventory of 1488. Gille described an actual specimen ornamented with gilt stars and roses and coats of arms which was to be seen in his day at Naples. As is to be expected, very few leather bards have survived the course of centuries. At the Tower of London one leather crupper remains of the sixty-six leather bards mentioned in the inventory of 1561 (ffoulkes, vi, 87). There are the interesting leather horse-armour of Matthias Stöckl at Salzburg, *Z.H.W.K.*, ix, p. 221, and instances at Turin (B. 2 and D. 69). M. Pauilhac possesses a crupper and two flanking pieces of cuir-bouilli, one of two sets, of which the other is now in America.

Pl. LXXXII, fig. 1, shows a representation of St. George by Leonhard Beck in the K. H. Museum at Vienna wearing typical cloth bases over his tassets and mounted on a horse whose bards are covered with rich textile. We have already passed in review the fluted horse-armour in Burgkmair's woodcut of Maximilian of 1508, fig. 26 (p. 26 *supra*). The two sales of the armoury of Prince Radziwill from the family castle of Nieswiez which took place at Christie's in 1926 and 1927 included no less than 22 chanfrons and 15 peytrals of Maximilian date, many of the latter bearing the Nürnberg mark. The 'Burgundian' bard in the Tower of London (vi. 6-12), believed to have been a present from Maximilian to Henry VIII, is a superb example of early repoussé decoration, his engraved bard vi. 1-5, also in the Tower, and Maximilian's own bard at Vienna (no. 52) with the double-headed eagle, beautifully embossed, etched, blued and gilt, are examples of Maximilian horse-armour which will readily occur to all. Sir Guy Laking has already dealt fully with the question of horse-armour in his twenty-second chapter, so that we need only add a few remarks.

In the armoury of Graf Erbach-Erbach there is a very fine Maximilian armour for horse and man, blued and engraved, of which the chanfron, crinet, peytral, and crupper are composed of leather with steel frames. The equestrian armour at Turin (B. 1) with the Sforza badge and ascribed to Cardinal Ascanio Sforza, but more likely that of Francesco Maria Sforza, with whom it better agrees in point of date, presents a curious feature which does not appear to have been hitherto remarked. The near side of the horse-armour is ornamented with the badge of the sunburst on a black ground introduced between groups of flutes. But on the off-side the armour of the horse is quite plain and the fluting is differently arranged, consisting of ribs at regular intervals, and not in pairs with a space between, as on the near side. The division takes place down the middle of chanfron and peytral, and it is similarly dimidiated on the crupper behind.

Attention has been drawn by many writers to the painting on canvas at Vienna of Harnischmeister Albrecht riding a horse clad in steel down to the hoofs, and Sir Guy Laking stated in his *Record*, vol. iii, p. 196, that he doubted if such armour for the horse ever really existed, at the same time saying that he 'believed this to be the sole pictorial evidence of complete armour for the horse's legs'. There is a drawing, however, in a book in the library of Graf Thun at Tetschen showing Maximilian, when archduke, in a suit of Gothic armour riding a horse similarly encased (reproduced V. *Fahr.*, vii, 1888), and Maximilian's treble thaler of 1509, which we have had occasion to mention above in another connexion (pl. LXXXIII, fig. 1), shows his horse's legs protected by articulated plates as far as the fetlocks on both fore and hind legs, and so does the thaler of the archduke Ferdinand of Austria of 1522 (pl. LXXXIII, fig. 2).



Fig. 1. Treble thaler of Maximilian I, 1509, the horse with armoured legs



Fig. 2. Treble thaler of Ferdinand, 1522, the horse with armoured legs



Fig. 3. Brass of Sir Thomas Brooke, d. 1529. Cobham, Kent



Fig. 4. Breast-plate attributed to the condottiere Bartolommeo Colleoni, showing etched decoration in the Italian style. Kunsthistorisches Museum, Vienna (no. 122)

In the correspondence of the Gonzagas, published by Bertolotti in his *Arti minori alla corte di Mantova*, p. 130, we find the armourer Lorenz Colman of Augsburg writing to the marquis in 1512 about '*una bella barda da azalo tutta serrada de la testa fina alle ungie del cavallo qual se potra manegiar senza fatica alcuna* (sic!) *come mi ho visto vostri belli cavalli mi penso mi in la fantasia fare una si bella barda . . .*' Mr. Cripps-Day has drawn my attention to yet another reference to horse-armours of this nature mentioned in a letter from Sir Robert Wingfield to Henry VIII dated 24th July 1515, where he states that the Emperor had recently presented the young king of Poland with 'two coursers all covered with steel to the fetlocks and [round] the belly, save in the spurring place' (C. S. P., no. 746). The Musée de la Porte de Hal possesses what is described as a cuisse for the off hind leg of a horse (Cat. of 1902, series iv. 9, and illustrated in ffoulkes, *The Armourer and his Craft*, fig. 7) fluted in the Maximilian manner with articulated plates on the inner side. Two other pieces, possibly for the upper part of the fore-legs of a horse, appeared in the first Radziwill sale at Christie's (29th June 1926), lots 115 and 119, where they were each catalogued as 'the rere-plate of a lance'. One is now in the collection of Mr. Cripps-Day and the other is in the Metropolitan Museum, New York (fig. 2). There is some danger of confusing pieces such as these with articulated pauldrons of the type worn on the tonlet armour, no. 61 at Vienna (described by Schrenck as that of Albert Achilles, Margrave of Brandenburg, but considerably later than his date). As we have not ourselves had the advantage of examining the Porte de Hal piece we mention it in this connexion with some diffidence, but the two Radziwill pieces are so constructed as to be unwearable as pauldrons. Laking drew attention to the short cuisses on the fore-legs of some of the barded horses in the 'Triumph of Maximilian' (vol. iii, fig. 1005), and it is worth noting that these appear also in the remarkable battle-picture by Altdorfer in the Alte Pinacothek at Munich known as the *Alexanderschlacht*. One imagines, however, that armour of this kind was only produced in a spirit of bravado.¹

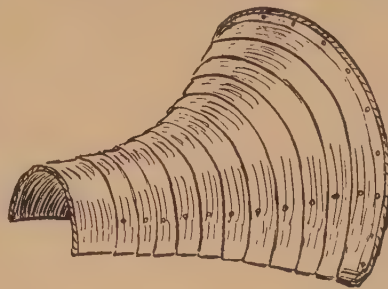


Fig. 2. Portion of leg armour of a horse.

In this Maximilian armour provides us with another instance of a not uncommon phenomenon, that a subject only attains to its fullest development after the need for it has passed. The stage-coach reached its maximum efficiency on the new Bath Road some years after the steam locomotive had made its

¹ Since writing the above, I understand that M. Buttin is engaged upon a monograph on this subject, which all students will await with great interest.

appearance, and judging from pictorial representations, horse-armour was not so common in the fourteenth and fifteenth centuries as during the Maximilian period, when the forces which were to displace armour had already come into play.

Acknowledgements are due to the Somerset Archaeological Society for pl. lxxxiii, fig. 3, and to Messrs. Alinari, Florence, for pls. lxxiii, fig. 2 and lxxxi; Anderson, Rome, for pl. lxxii, fig. 1; Christof Müller, Nürnberg, for pl. lxvii, fig. 2; Fot. dell' Emilia, Bologna, for pls. lxx, fig. 2 and lxxv, fig. 3; Giraudon, Paris, for pl. lxxxii, fig. 2; Gundermann, Würzburg, for pls. lxvii, figs. 1, 3 and lxxv, fig. 2; Hanfstaengl, Munich, for pl. lxxxii, fig. 1.

I have to thank Mr. A. E. Popham for drawing my attention to recent literature on the Albertina drawing mentioned on p. 221.

INDEX TO VOLUME LXXIX

A

- Abernon, d', brass, the armour shown on the, 21.
 Abingdon, abbot of, letters of fraternity issued by the, 182-3, 194.
 Adad-Nirari III, bricks of, 123; restoration of the Temple of Nabû by, 104.
Agammu (pool or reservoir), the, of Sennacherib, 114-16.
 Agate beads from Nineveh, 142-3.
 Alabaster: bowl from Nineveh, 121; panels of St. Thomas Becket, 43 n., 47; slabs from Nineveh, 111.
 Albans, St., Cathedral, wall-painting of St. Thomas Becket in, 31.
 Alberti, Durante, painting of St. Thomas Becket by, 35.
 Albrecht, Harnisch-Meister, horse armour by, 19.
 Allen, William, letter of fraternity by, 191.
 Almicantifer, John Blagrave's, 67, 68.
 Amazonite beads from Nineveh, 143.
 Amber beads from Nineveh, 143.
 Amblardus, abbot of Newhouse, letter of fraternity issued by, 186-7.
 Amethyst bead from Nineveh, 143.
 Ampersand occasionally represented by Z on seals, 164.
 Amphora from Nineveh, 137.
 Ampullae, figure of St. Thomas Becket on, 32 n.², 46 n.².
 Anagni Cathedral, embroidered dalmatic in, 47.
 Angels, the representation of, in the roof bosses of Tewkesbury Abbey, 76-9.
 Animal representations on Celtic bronzes, 3, 4, 5, 6-7, 9.
 Arbroath Abbey (Forfar), seal of, 45.
 Armet, the, type of helmet, 24, 25, 230.
 Armour, convenience of, 21-6; decoration of, 14, 15, 27-8, 217 ff.; fluted, 217, 224 ff.; German, 217 ff.; Gothic, 217, 219, 220; horse-, 19, 25, 241-3; of the Italian wars, 217-44; respect for the materials of, 26-7; Maximilian, 14, 19, 217-44; Milanese, 217 ff.; Norman, 14, 16, 24; purpose of, 15-21; representations of, 21-4, 217 ff.; slashed, 27, 241; styles of, 217 ff.; weapons in relation to, 20, 25.
 —: armet, 24, 25, 230; bard, 241-3; bascinet, 16,

- 24; breast-plate, styles of, 222 ff.; brigandine, 19; camail, 21; cops, 22, 23, 224; hauberk, 21; helmet, 15-17, 24-5, 26, 225; jack, 19; mail, 21, 24; morion, 25; nasal, 14, 15, 21; pallet, 22; pauldron, 23, 24, 220, 221; plate, 23-4; sabaton, 220; sallade, 16, 24, 230-1, 235; shield, 24; solleret, 22-3; splint, 24; tasset, 220, 223; vambrace, 24; visor, 26, 234-5.
 Armourer, the craft of the, 13-28.
 Armourers: Harnisch-Meister Albrecht, 19; Benvenuto Cellini, 27; Jacob Halder, 27; Knopf, 27; Missaglia family, 18, 23; Pefenhauser, 27; Piccinino, 27; William Pickering, 27; Conrad Seusenhofer, 27; Sigismund of Tirol, 22.
 Arras: church of St. Nicolas-aux-Fossés, painting of St. Thomas Becket in the one-time, 51 n.⁴.
 Arundel, Thomas, archbishop of Canterbury, seal of, 45.
 Arundel collection, picture of St. Thomas Becket in the, 34.
 Ascension, the, represented in a roof boss of Tewkesbury Abbey, 83.
 Ashurbanipal, prisms of, 103, 106; his restoration of the Temple of Nabû, 104, 105, 107; sculpture of, 107.
 Ashurnasirpal, bricks of, 122-3; palace of, revealed at Nineveh, 103, 105; the tablet from, 126-34.
 Ashuršumušabši, house of, dug out at Nineveh, 103.
 Assche, Stephen, letter of fraternity from, 188-9.
 Astrolabes, Uranical, John Blagrave's, 55, 64-70.
 Aubrey, John, volume presented by, to the Ashmolean, 58.
 Austin Canons, letters of fraternity issued by, 186, 197, 208.
 — Friars, letters of fraternity issued by the, 191, 192, 196, 198, 211-12.
 Axe, the pole-, as a practical weapon, 30.

B

- Bachner, Dr., 42 n.
Baculum Familiare Catholicum, John Blagrave's, 62-3.
 Bagdad Museum, beads from Nineveh in the, 142.
 Bagpipe represented in a roof boss of Tewkesbury Abbey, 77.
 Bahram V, coins of, from Nineveh, 107.

- Baileys, the, of Corfe Castle, 91, 92, 93-4, 97-101.
 Banks, Sir John, purchase of Corfe Castle by, 92.
 Barbara, St., the representation of, on armour, 227 ff.
 Bards (armour), 241-3.
 Bardswell, Miss, 52 *n.*¹
 Barfreston (Kent), church of, supposed figure of St. Thomas Becket in the, 32 *n.*¹
 Bartholomew, master of the order of Dominicans, letter of fraternity issued by, 188.
 Basalt inscriptions from Nineveh, 119, 121.
 Bascinet, the, type of helmet, 16, 24.
 Bas-reliefs of St. Thomas Becket, 39 *n.*³, 43, 46-7.
 Battlefield College (Shrewsbury), letter of fraternity issued by, 198.
 Bayeux Cathedral, bas-relief of St. Thomas Becket in, 43.
 Beads from Nineveh, 142-8: agate, 142-3; amazonite, 143; amber, 143; amethyst, 143; calcite, 143; carnelian, 143-4; chalcedony (?), 148; faience, 144; frit, 144; garnet, 144; glass, 145-6; gypsum, 146; ivory, 146; lapis lazuli, 146; limestone, 147; obsidian, 147; ostrich shell, 147; quartz, 147; serpentine, 147; steatite, 148.
 Beatty, Chester, 12.
 Beazley, Prof., 138.
 Beck, H. C., on the beads found at Nineveh, 142-8.
 Bell, Gertrude, bequest, 103 *n.*¹
 Belvoir Castle, letter of fraternity at, 179.
 — Priory, admissions to fraternity in, 179-80, 181.
 Benedictine letters of fraternity, 179-80, 180-1, 194, 196, 206-7.
 Bentley, William, 84.
 Berlin: Schlossmuseum, Limoges chasse in the, 49 *n.*²
 Betrayal, the, represented in a roof boss of Tewkesbury Abbey, 81-2.
 Bill, the, as a practical weapon, 20.
 Black Friars, letters of fraternity issued by, 209-10.
 Blades, flint and obsidian, from Nineveh, 116, 136.
 Blagrove, John, his descent, 55; his life, 55-6; his scientific tastes and training, 56; the inscription on his monument, 71-2; poem by, 72.
 —, his Uranical Astrolabe and other inventions, 55-72; *The Art of Dyalling*, 70-1; *Astrolabium Uranicum Generale*, 64, 65-70; *Celestial Planisphere*, 65, 66-7; *Domineering Table*, 66; *The Familiar Staffe*, 62-3; *Horarium Planetarium*, 66; *A Map of the World*, 64-5; *The Mathematical Jewel*, 56-62; *Precession Tables*, 66; *Zenitfer*, 65, 67-9.
 Blasien, St., diocese of (Brunswick), seal of the, 39 *n.*³
 Blessed Virgin Mary of Newton, gild of, letters of fraternity issued by, 198.
 — and St. George, gild of (Southwark), letter of fraternity issued by, 198.
 Bodmer, Dr. H., 54 *n.*
 Bologna: Museo Civico, embroidered copes in the, 47.
 Bond, Thomas, excavations at Corfe Castle by, 94.
 Books of Hours, figures of St. Thomas Becket in, 36 *n.*¹, 47, 51.
 Borenus, Tancred, 'The Iconography of St. Thomas of Canterbury', 29-54.
 Borscher Aue (Saxe-Weimar), flagon from the, 6.
 Bosses, ceiling, figures of St. Thomas Becket on, 46.
 Bosses, roof, in the nave of Tewkesbury Abbey, 73-84.
 Boucher, Camille, painting of St. Thomas Becket by, 53.
 Bouchier, Henry, count of Eu, and his son, admission to fraternity of, 181.
 Bouzonville (Dépt. of Moselle), Celtic bronzes from, 1-12; the archaeology of, 10.
 Bow, the long-, as a practical weapon, 20.
 Bowl, alabaster, from Nineveh, 121; pottery, 137.
 Bramley church (Hants), wall-painting of St. Thomas Becket in, 52, 52 *n.*¹
 Brasses, representations of armour on, 21, 22, 23; — of St. Thomas Becket on, 32, 34.
 Breast-plates, styles of, 222 ff.
 Brewers, Company of, the patron saint of the, 31.
 Bricks from Nineveh, 109, 122-6.
 Bridges, the, of Corfe Castle, 92, 101-2.
 Bridgwater Borough records, letter of fraternity in the, 190-1.
 Brigandine armour, 19.
 Bronze objects from Nineveh: buckets, 106; coins, 107 *n.*; cup, 110; gates, 106.
 Bronzes, Celtic, from Lorraine, 1-12
 Brunswick: Cathedral, wall-paintings of St. Thomas Becket in, 39; Egydienkirche, statues of St. Thomas Becket in the, 39 *n.*³; Minderenkirche, painting of St. Thomas Becket in the, 39 *n.*³
 Brusasorzi, Felice, painting of St. Thomas Becket by, 35.
 Buckets, bronze, from Nineveh, 106.
 Buckingham, earl of, and his family, admission to fraternity, 181.
 Burgh, Elizabeth de, admission to fraternity, 180.
 Burgh St. Peter (Norfolk), wall-painting of St. Thomas Becket (?), 52 *n.*¹
 Burials at Nineveh, 110.
 Burlingham, South, church (Norfolk), wall-painting of St. Thomas Becket in, 52, 52 *n.*¹

Burnham Market (Norfolk), St. Mary's church, bas-reliefs of St. Thomas Becket in, 46-7.
 Burton Lazars Hospital, letters of fraternity issued by, 194, 196, 197, 214.
 Bury St. Edmunds, formula of admission to fraternity from, 180; receptions into fraternity at, 180-1.
 Butavant, or west tower, of Corfe Castle, 97-9.
 Byzantine mosaics, the, of the cathedral of Monreale, 30.

C

Calcite bead from Nineveh, 143.
 Camail, the, in armour, 21.
 Cambridge: Corpus Christi College, drawing in, 51; Fitzwilliam Museum, ivory in the, 47; Pembroke College, letter of fraternity to, 190; Trinity College, lists of admission to fraternity in, 181; University Museum of Archaeology and Ethnography, pilgrim's sign in the, 32 n.²
 Campbell, E. G., 140 n.
 Canterbury: Archbishops of, representations of St. Thomas Becket on the seals of, 44-5; Cathedral, panel-painting of St. Thomas Becket in, 51; Cathedral Priory, counter-seal of, 45; Christ Church, letters of fraternity from, 180, 181; Eastbridge Hospital, wall-painting of St. Thomas Becket in, 52 n.¹; Royal Museum, pilgrims' signs in the, 32.
 Carew, Sir George, 63.
 Carmelite Friars, letters of fraternity issued by, 192, 212.
 Carnelian beads from Nineveh, 143-4.
 Carrow Psalter, illumination of St. Thomas Becket in the, 50-1.
 Carthusian letters of fraternity, 180, 185-6, 192, 197, 208.
 Carving of St. Thomas Becket, 32.
 Cathedral Chapters, letters of fraternity issued by, 194, 216.
 Catherine of Alexandria, St., the representation of, on armour, 228.
 Cave, C. J. P., 46 n.⁴; 'Roof Bosses in the Nave of Tewkesbury Abbey,' 73-84.
 Cawdor, Lord, 12.
 Ceiling bosses, figures of St. Thomas Becket on, 46.
 Celestial Planisphere, John Blagrave's, 65, 66-7.
 Cellini, Benvenuto, armour by, 27.
 Celtic bronzes from Lorraine, 1-12.
 Censers represented in the roof bosses of Tewkesbury Abbey, 76.
 Chain mail, inconvenience of, 21, 24.
 Chalcedony (?) bead from Nineveh, 148.

Champlevé enamel, in Celtic bronzes, 3, 7; representations of St. Thomas Becket, 48-50.
 Chapel of St. Mary in Corfe Castle, 91-2, 93.
 Chartres Cathedral, figures of St. Thomas Becket in the stained glass of, 38, 49; —, among the bas-reliefs in, 46.
 Chartreuse, Grande, letters of fraternity issued by the Prior of the, 180, 185.
 Châsses, Limoges, representations of St. Thomas Becket on, 38, 48-50.
 Chester Cathedral, bas-relief of St. Thomas Becket in, 46.
 Christ, the finding of the Child, in the Temple, represented in a roof boss of Tewkesbury Abbey, 80-1.
 Christ's entry into Jerusalem represented in a roof boss of Tewkesbury Abbey, 81.
 Christian pottery from Nineveh, 139.
 Christopher, St., representations of, on armour, 227, 236.
 Circignani, Niccolò, painting of St. Thomas Becket by, 53.
 Circumcision (?), representation of the, in a roof boss of Tewkesbury Abbey, 80.
 Cismontane Observants, letters of fraternity issued by, 189-90, 210.
 Cistercian letters of fraternity, 179, 184-5, 197, 207-8.
 Citole represented in a roof boss of Tewkesbury Abbey, 76-7.
 Clapham, A. W., 31 n.²
 Clarke, C. G. Louis, 54 n.
 Clauasio, Angelus de, letter of fraternity by, 189.
 Clemen, Professor, 52.
 Clermont Museum, Limoges chässe in the, 49 n.²
 Cluniac letter of fraternity, 179, 183-4, 197, 207.
 Cluny, Musée de, pilgrim's sign in the, 46 n.²; Limoges chässe in the, 50.
 Cockerell, S. C., 54 n.
 Coins from Nineveh, 107.
 Colleges, letters of fraternity issued by, 194, 216.
 Colleoni, armour on the statue of, 23; armour by, 222.
 Company of Brewers, the patron saint of the, 31.
Confraternitas, instance of a cathedral, 182.
 Cooke, R. S., 103-4 n.
 Coopers, Wine, the patron of, 31.
 Copes, representations of St. Thomas Becket on embroidered, 47.
 Cops, elbow, 22, 23, 224.
 Coral inlay in Celtic bronzes, 3, 4; its provenance, etc., 5-6, 8.
 Corfe Castle, its history, construction, and present condition, 85-102: the baileys, 91, 92, 93-4, 97-101; the bridges, 92, 101-2; the Butavant or west tower, 97-9; the chapel of St. Mary, 91-2,

- 93; the gateways, 99-101; the Gloriets, 88, 92, 93, 94, 96; John's ditch, 88, 90, 99, 100, 101; the keep or King's Tower, 88, 93, 94-6; the stables, 91.
 Corfe Gate, 85.
 Corner (?), Henry, painting of St. Thomas Becket by, 53 *n.*
 Coronation of the Virgin, the, represented in a roof boss of Tewkesbury Abbey, 83.
 Corvensgeat, 85.
 Courts, Prerogative, seals of, 45.
 Cowfold (Sussex), figure of St. Thomas Becket on the Nelond brass at, 34.
 Cowley, Dr. A. E., 109.
 Cranmer, Archbishop, seal of the Prerogative Court of, 45.
 Craster, Dr. H. H. E., 179, 194.
 Creke, Sir John de, brass, the armour shown on the, 21.
 Crown, the, in representations of St. Thomas Becket, 35.
 Croyland Abbey (Lincs.), Limoges chässe from, 49.
 Crucifixion, the, represented in a roof boss of Tewkesbury Abbey, 82.
 Crutched Friars, letter of fraternity issued by the, 194, 198, 213.
 Culpeper, Elizabeth, admitted to fraternity, 181.
 Cup, bronze, from Nineveh, 110.
 Cursor, John Blgrave's, 67-9.
 Cymbals represented in a roof boss of Tewkesbury Abbey, 78.

D

- Dalmatic, representation of St. Thomas Becket on an embroidered, 47.
 Darell, Joan, letter of fraternity to, 194.
 David, Sir Percival, 12.
 Davies, Mr., 84.
 Decoration of armour, 14, 15, 27-8.
 Denis, St., representations of, 35.
 Dialling, John Blgrave on the art of, 70-1.
 Digges, Leonard, 63.
 Dilks, T. Bruce, 179.
 Doil collection, Limoges chässe in the, 49 *n.*²
 Domineering Table, John Blgrave's, 66.
 Dominican letters of fraternity, 188-9, 192.
 Door socket found at Nineveh, 103 *n.*¹
 Dorling, Rev. E. E., 102.
 Drawing, pen and ink, of St. Thomas Becket, 51.
 Drey, A. S., Limoges chässe in the collection of, 49 *n.*²
 Drury, Dr. Dru, 102.
 Drury, Elizabeth, admitted to fraternity, 181.
 Drury, Henry, admitted to fraternity, 181.

- Ducks, representation of, in Celtic bronzes, 5.

E

- Easton church (Norfolk), wall-painting of St. Thomas Becket in, 52 *n.*¹
 Eaton church (Norfolk), wall-painting of St. Thomas Becket in, 52 *n.*¹
 Edenham (Lincs.), figure of St. Thomas Becket on a brass at, 34.
 Edmund, St., painting of, 35.
 Edward I, work on Corfe Castle by, 94.
 Edward II and Corfe Castle, 90.
 Edward III, work on Corfe Castle by, 92.
 Eleanor of Brittany, imprisonment of, in Corfe Castle, 90.
 Elizabeth, Queen, sale of Corfe Castle by, 92.
 Ely, letter of admission to fraternity at, 180.
 Embroideries, figures of St. Thomas Becket on, 31 *n.*², 47.
 Enamel in Celtic bronzes, 3, 4, 7-9.
 Enamel-work representations of St. Thomas Becket, 34, 38, 48-50.
 Engravings of St. Thomas Becket, 53.
 Epigraphy, the, of English medieval seals, 149-78.
 Esarhaddon, prisms of, found at Nineveh, 103.
 Escorial, Limoges chässe in the, 49 *n.*²
 Etchings, of St. Thomas Becket, 34; on armour, 222 ff.
 Evangelistic symbols represented in the roof bosses of Tewkesbury Abbey, 79.
 Excavations on the Temple of Nabû at Nineveh, 103-48.
 Exeter cathedral, bas-relief of St. Thomas Becket in, 46.
 Eyck, Jan van, painting of St. Thomas Becket attributed to, 34, 43.

F

- Faber, Francis, letters of fraternity by, 189, 190.
 Faience beads from Nineveh, 144.
 Fairford church, figure of St. Thomas Becket in the stained glass of, 34.
 Falke, Dr. Otto von, 54 *n.*
 Familiar Staffe, John Blgrave's, 62-3.
 Faversham church (Kent), wall-painting of St. Thomas Becket in, 52 *n.*¹
 Fayette, Mme, Limoges chässe in the collection of, 79 *n.*
 Felice Brusasorzi, painting of St. Thomas Becket by, 35.
 Felspar beads from Nineveh, 143.
 Foulkes, Major Charles J., 84; 'Some Aspects of the Craft of the Armourer', 13-28.

- Fiocco, Dr. Giuseppe, 54 *n.*
 Firearms, the use of, in relation to armour, 25.
 Flagons, Celtic bronze, 2-8.
 Flint blades from Nineveh, 116, 136.
 Fluted armour, 217, 224 ff.
 Foljambe, F. J. Saville, alabaster panel in the collection of, 47.
 Font, representation of St. Thomas Becket on a, 46.
 Forsdyke, E. J., 138.
 Foster, Canon, 179 *n.*²
 Foundations, the, of the Temple of Nabû, Nineveh, 105.
 Fowler, R. C., 179.
 Franciscan letters of fraternity, 189, 190-1, 192, 204, 211.
 Francke, Meister, panel-painting of St. Thomas Becket by, 40-2.
 Fraternity, letters of, 179-216.
 Freman (?), George, painting of St. Thomas Becket by, 53 *n.*
 Fresco representations of St. Thomas Becket, 31, 51.
 Friars, letters of fraternity issued by, 209-14.
 Friars Minors of the Holy Land, letters of fraternity issued by, 189, 210.
 Friedländer, Dr., 43.
 Frit beads from Nineveh, 144.
 Frome Vowchurch, Fraternity of (Sarum), letter of fraternity issued by the, 198.
 Furnaces from Nineveh, 109.
- G
- Gabmeson, the use of the, 21.
 Garnet beads from Nineveh, 144.
 Gates, pieces of bronze, from Nineveh, 106.
 Gateways, the, of Corfe Castle, 99-101; of the Temple of Nabû, Nineveh, 106, 111-13.
 Gaulish vase, 4-5.
 Geisa (Saxe-Weimar), flagon from near, 6-7.
 George, St., armour in Pisanello's picture of, 23; — in the statue of, at Prague, 24; representations of, on armour, 227, 236.
 George, St., and the Dragon, sculptured group of, 32.
 German style of armour, 217 ff.
 Gifford, Bishop Godfrey, 182.
 Gilbertine letter of fraternity, 180, 187, 209.
 Gilds, letters of fraternity issued by, 194, 196, 197-201, 215-16.
 Gillingham church, transfer of the advowson of, 85-6.
 Girolamo da Santa Croce, painting of St. Thomas Becket by, 31.
- Girolamo da Treviso, painting of St. Thomas Becket by, 35.
 Gittern represented in a roof boss of Tewkesbury Abbey, 77.
 Glass, from Nineveh, 109; — beads from Nineveh, 145-6.
 Glass, stained, figures of St. Thomas Becket in, 34, 35, 36-8.
 Gloriets, the, of Corfe Castle, 88, 92, 93, 94, 96.
 Gloucester, Duke of (1433), reception into fraternity, 181.
 Gloucester Cathedral, the roof bosses of, 78.
 God the Father represented in a roof boss of Tewkesbury Abbey, 83.
 Goethals-Danneel MS., figures of St. Thomas Becket in the, 36, 39.
Golden Legend, representations of St. Thomas Becket in editions of the, 47-8.
 Goldschmidt, Professor A., 54 *n.*
 Gothic armour, 217, 219, 220.
 Gould, Frank J., alabaster panel in the collection of, 47.
 Gousa, Peter de, letter of fraternity to, 187.
 Graham, Dr. Rose, 179, 202-3.
 Grant, Richard, archbishop of Canterbury, counter-seal of, 45.
 Graves in the Temple of Nabû, Nineveh, 110-11.
 Gravina Cathedral, relic of St. Thomas Becket in, 48 *n.*
 Graz Museum, panel-painting of St. Thomas Becket in the, 42.
 Greek, elements in Celtic bronzes, 1-7; inscriptions from Nineveh, 140-2; pottery from Nineveh, 138.
 Green, Lycett, 12.
 Greenwell Deeds, letter of fraternity among the, 179.
 Grey Friars, letters of fraternity issued by, 210-11.
 Grylls, Mr., 74.
 Guéret Museum, Limoges chasse in the, 49 *n.*²
 Guitar fiddle represented in a roof boss of Tewkesbury Abbey, 77.
 Gulbenkian, C. S., 12.
 Gunther, Dr. R. T., 'The Uranical Astrolabe and other Inventions of John Blagrave of Reading', 55-72.
 Gypsum beads from Nineveh, 146.
- H
- Halder, Jacob, armourer, 27.
 Hall, Dr. H. R., 103-4 *n.*
 Hamburg Museum, panel-painting of St. Thomas Becket in the, 41; Limoges chasses in the, 49 *n.*²

Harps represented in the roof bosses of Tewkesbury Abbey, 76.
 Hatton, Sir Christopher, purchase of Corfe Castle by, 92; work on it by, 101.
 Hauberk, convenience of the, 21.
 Hauxton church (Camb.), wall-painting of St. Thomas Becket in, 31.
 Heawood, Edward, 65.
 Heidal church (Norway), figures of St. Thomas Becket on a reliquary in the, 46.
 Helmets, types of, 15-17, 24-5, 26, 225.
 Hemblington (Norfolk): All Saints, wall-painting of St. Thomas Becket in, 52 *n.*¹
 Henry I, work on Corfe Castle by, 88, 93.
 Henry III, letter of fraternity to, 188; work on Corfe Castle by, 90, 92, 93.
 Henry VI, reception into fraternity of, 181.
 Henry VII, work on Corfe Castle by, 92, 94.
 Henry VIII, armour of, 14, 24, 26, 27.
 Hereford Cathedral, figure of St. Thomas Becket on a brass in, 34 *n.*²; — library, Limoges chässe in the, 49, 49 *n.*²
 Hildburgh, Dr. W. L., 54 *n.*; alabaster panel in the collection of, 43 *n.*
 Hill, Dr. G. F., 107 *n.*
 Hingham church (Norfolk), wall-painting of St. Thomas Becket in, 52 *n.*¹
 Hoard of Celtic bronzes, 1.
 Hohenzollern collection, Limoges chässe in the, 49-50 *n.*
 Hollar, W., etching of St. Thomas Becket by, 34.
 Holy Trinity Hospital (Rome), letters of fraternity issued by, 194, 195, 197, 214.
 — (Walsoken), letters of fraternity issued by, 194, 195, 196, 198, 215.
 Homberg collection, ivory in the, 47.
Horarium Planetarium, John Blagrove's, 66.
 Horse armour, 19, 25, 241-3.
 Hospitals, letters of fraternity issued by, 194-6, 197-203, 214-15.
 House of Ashuršumušabši dug out at Nineveh, 103.
 Houvet, Étienne, 38 *n.*⁵
 Hull, Eleanor, 103 *n.*¹
 Hull, H. W., 54 *n.*
 Hunt, Prof., 140 *n.*
 Hussey, Robert, letters of fraternity issued to, 179-80, 187.
 Hutchinson, R. W., and R. Campbell Thompson, 'The Excavations on the Temple of Nabû at Nineveh', 103-48.
 Hyde, Sir Charles, 103 *n.*¹

I

Iconography of St. Thomas of Canterbury, the, 29-54.
 Ilchester, Black Friars of, admission to the prayers of the, 188-9.
 Illuminations, figures of St. Thomas Becket in, 36, 50-1.
 Inscription relating to St. Thomas Becket, 40 *n.*¹
 Inscriptions from Nineveh, 117-35; brick, 122-35; Greek, 140-2; stone, 117-21.
 Instruments, musical, represented in the roof bosses of Tewkesbury Abbey, 76-8; of the Passion —, 78.
 Isabel, daughter of William king of Scotland, imprisonment of, in Corfe Castle, 90.
 Isabella, Queen, imprisonment of, in Corfe Castle, 90.
 Ishtar, Temple of, Nineveh, 103 *n.*¹, 105.
 Italian wars, the armour of the, 217-44.
 Ivories, representations of St. Thomas Becket on, 47.
 Ivory, bead from Nineveh, 146; object from Nineveh, 109.

J

Jack armour, 19.
 Jackson, Sir Herbert, 147.
 Jardine, Major, 103-4 *n.*
 Jars, Celtic wine-, 1-2; from Nineveh, 108, 137.
 Jesus Gild in St. Paul's Crypt, letters of fraternity issued by the, 197, 198.
 Jewel, Mathematical, John Blagrove's, 56-62.
 John, King, work on Corfe Castle by, 88, 90.
 John's ditch of Corfe Castle, 88, 90, 99, 100, 101.
 Johnston, P. M., 36 *n.*¹
 Jugs from Nineveh, 108, 137, 139.

K

Keep or King's Tower, the, of Corfe Castle, 88, 93, 94-6.
 Kellon, William de, letter of fraternity to, 179.
 Kendale, John and Elizabeth, letter of fraternity to, 188-9.
 Kendrick, A. F., 54 *n.*
 Kenyon, Sir Frederic, 103-4 *n.*
 Kerspe [? Kershope], Henry and Margaret, letter of fraternity to, 185.
 King, Dr. L. W., excavations at Kouyunjik, 103 *n.*²
 King's Tower or keep, the, of Corfe Castle, 88, 93, 94-6.
 Kingsford, H. S., 'The Epigraphy of Medieval English Seals', 149-78.
 Knebworth, doubtful figure of St. Thomas Becket on a brass at, 34 *n.*²

- 'Knolles-almeshous' (Pontefract), letters of fraternity issued by, 196.
Knollys, Sir Francis and Sir William, 62.
Knopf, armourer, 27.
Knowles, J. A., 54 *n.*
Kouyunjik (Nineveh): Temple of Nabû, excavations on the, 103-48.

L

- Label, the, of John Blagrave's Mathematical Jewel, 59.
Lady of Pity (de Mercede), Hospital of, fraternity letters issued by, 201.
Lamps from Nineveh, 103, 107, 138.
Langdon (Kent), Priory of St. Mary, seal of the, 45.
Langley, Henry and Katherine, letter of fraternity to, 188.
Langton, Stephen, archbishop of Canterbury, counter-seal of, 45.
Lapis lazuli beads from Nineveh, 146.
Larnax burials at Nineveh, 110, 110 *n.*²
Last Supper represented in a roof boss of Tewkesbury Abbey, 81.
Laughton (Lincs.), armour from, 17.
Lenton Priory, letter of fraternity from, 179, 183-4.
Letters of fraternity, 179-216; classified list of, 206-16.
— issued by: FRIARS: Austin, 191, 196, 198, 211-12; Black, 209-10; Carmelite, 192, 212; Crutched, 194, 198, 213; Grey, 210-11; Trinitarian, 192-3, 197, 200, 212-13. GILDS: 194, 196, 197-201, 215-16. HOSPITALS: 194-6, 197-203, 214-15. MONASTIC HOUSES: Austin Canons, 186, 197, 208; Benedictine, 179-80, 180-1, 194, 196, 206-7; Carthusian, 180, 185-6, 192, 197, 208; Cistercian, 179, 184-5, 197, 207-8; Cluniac, 179, 183-4, 197, 207; Gilbertine, 180, 187, 209; Houses of Nuns, 209; Premonstratensian, 186-7, 197, 208. SECULAR CLERKS: Cathedral Chapters, 194, 216; Colleges, 194, 216.
Liber Albus, the, of Worcester, 182.
Lichfield, Dean of, 194.
Ligatures on English medieval seals, 164.
Limay, Ratouis de, 54 *n.*
Limestone objects from Nineveh: beads, 147; slabs and fragments, 103 *n.*¹, 105, 107, 108, 110, 117-19, 120.
Limoges enamel, representations of St. Thomas Becket in, 34, 38, 48-50.
Lincoln Cathedral, figure of St. Thomas Becket in the stained glass of, 35.
Lincoln Charters, letters of fraternity among the, 179.

- Lindblom, Professor Andreas, 54 *n.*
Lions, representations of, in Celtic bronzes, 3, 4, 6-7, 9.
Little, Dr. A. G., 179, 189.
LONDON: British Museum: alabaster panel, 47; Assyrian basalt object, 119; beads from Nineveh, 142; Celtic bronzes, 1-12; excavations at Nineveh, 103-4; illuminations, 50-1; Limoges chasses, 49; Morel collection, 1, 4-5; pilgrims' signs, 32, 46 *n.*²; seal matrix, 45; Uranical Astrolabe, John Blagrave's, 64. — library, letters of fraternity, etc., 191, 194, 196, 204-5. Guildhall Museum, pilgrims' signs, 32, 46 *n.*²; *reliquaire-chef*, 34; London Museum, pilgrims' signs, 32. Public Record Office, letters of fraternity in the, 196. Victoria and Albert Museum, ivories, 47; Limoges chässe, 49 *n.*²; water-colours of a panel-painting, 51 *n.*¹ Westminster Abbey, document in, 182.
Long-bow, the, as a practical weapon, 20.
Lorraine, Celtic bronzes from, 1-12.
Ludlow, letters of fraternity issued by the Austin Friars of, 198.
Lydiard Tregoze church (Wilts.), wall-painting of St. Thomas Becket in, 52 *n.*¹
Lyngsjö church (Sweden), representation of St. Thomas Becket on a font in, 46.
Lyons Museum, Limoges chässe in the, 49, 49 *n.*²

M

- MacGregor, Miss, 36 *n.*¹
Maclagan, Eric, 32 *n.*¹
Magi, representations of the, on roof bosses of Tewkesbury Abbey, 80.
Mail, chain, inconvenience of, 21, 24.
Mann, J. G., 'Notes on the Armour of the Maximilian Period and the Italian Wars', 217-44.
Marble, door socket found at Nineveh, 103 *n.*¹; fragment, 105.
March and Ulster, earl of, letter from the, 180.
Margery, daughter of William king of Scotland, imprisonment of, in Corfe Castle, 90.
Marquet de Vasselot, J. J., 54 *n.*
Mass-production of armour, 14.
Mater, the, of John Blagrave's Mathematical Jewel, 59.
Mathematical Jewel, John Blagrave's, 56, 62.
Mauriac (Cantal), St. Laurent de Vigeon, Limoges chässe at, 50.
Maximilian armour, 14, 19, 217-44.
Maxwell, Prebendary Clark-, 'Some Further Letters of Fraternity', 179-216.

- Medieval seals, the epigraphy of English, 149-78.
 Melchett, Lord, gift to the British Museum, 12.
 Mentmore church (Bucks.), wall-painting of St. Thomas Becket in, 52 *n*.¹
 Merstham church (Surrey), wall-painting of St. Thomas Becket (?) in, 52 *n*.¹
 Metalwork representations of St. Thomas Becket, 45-6.
 Metal worker, the armourer as a, 13-14, 17.
 Milanese armour, 217 ff.
 Mill, stone, found at Nineveh, 103 *n*.¹
 Missaglia family, the, of armourers, 18, 23, 219, 226.
 Mitres, representations of St. Thomas Becket on bishops', 47.
 Mogga, Walter, mason, 91.
 Monastic Houses, letters of fraternity issued by, 206-9.
 Monreale (Sicily), the mosaics of the cathedral of, 30.
 Moore, H. Paget, notes on the roof bosses of Tewkesbury Abbey by, 73, 75.
 Morel Collection, the, in the British Museum, 1, 4-5.
 Morion, the, type of helmet, 25.
 Mosaics, the, of the cathedral of Monreale, 30.
 Munich: Bavarian National Museum, embroidered mitre in the, 47.
 Musical instruments represented in the roof bosses of Tewkesbury Abbey, 76-8: bagpipe, 77; citole, 76-7; cymbals, 78; gittern, 77; guitar fiddle, 77; harps, 76; organ, portative, 77; pipe, 77; psaltery, 77; shawm, 77; symphony, 77; tabors, 77, 78; timbrel, 78.
- N
- Nabû, the Temple of, Nineveh, excavations on, 103-48.
 Namur: Treasury of the Sisters of Notre Dame, embroidered mitre in the, 47.
 Nasal, the, in helmets, 14, 15, 21.
 National Art-Collections Fund, 12.
 Nativity, representation of the, in a roof boss of Tewkesbury Abbey, 79.
 Nelond brass, figure of St. Thomas Becket on the 34.
 Nelson, Philip, 54.
 New York: Metropolitan Museum of Art, Limoges chässe in the, 49 *n*.²
 Newcastle-on-Tyne: Public Library, letter of fraternity in the, 179.
 Newington church (Oxon.), wall-painting of St. Thomas Becket (?) in, 52 *n*.¹
- Niblett, J. D. Thomas, notes on the roof bosses of Tewkesbury Abbey by, 73, 79.
 Nicaise, St., representations of, 35.
 Nicholas, St., a wall-painting of, 31.
 Nineveh, objects found at: amphora, 137; beads, 142-8; blades, flint and obsidian, 116, 136; bowls, alabaster and pottery, 121, 137; bricks, 109, 122-6; buckets, 106; coins, 107; cup, 110; door socket, 103 *n*.¹; furnaces, 109; gates, 106; inscriptions, 117-35, 140-2; jars, 108, 137; jugs, 108, 137, 139; lamps, 103, 107, 138; oil presses, 108; *piṭhoi*, 137; plaque, 109; pottery, 103, 103 *n*.¹, 105, 107, 108, 116-17, 135-40; prisms, 103, 106; saucer, 137; sculpture, 105, 107, 109; shells, 148; statue, 109; tablets, 103 *n*.¹, 108, 126-35; vase, 138; *zigāti*, 108.
 —: the *agammu* (pool or reservoir) near, 114-16.
 —: house of Ashuršumušabši dug out, 103.
 —: other mounds near, 116-17.
 —: palace of Ashurnasirpal revealed, 103, 105.
 —: Temple of Ishtar, 103 *n*.¹, 105.
 —: Temple of Nabû, excavations on the, 103-48; the Assyrian temple, 104-6; its destruction, 106-7; its reoccupation, 107-8.
 —: parts of the Temple excavated: the foundations, 105; the gateways, 106, 111-13; the graves, 110-11; pavements, 104, 105, 106; a portico, 108; a privy, 106; shafts, 105; a well, 106.
 Norman armour, 14, 16, 24.
 Notke, Bernt, sculptor, 32.
 Nottingham: St. Mary's church, alabaster panel in, 43 *n*.
 Nuns, houses of, letters of fraternity issued by, 209.
- O
- Obsidian, beads, 147; blades from Nineveh, 116, 136; flakes from Nineveh, 117.
 Oil presses from Nineveh, 108.
Oinochoae, Celtic, 2-3.
 Organ, portative, represented in a roof boss of Tewkesbury Abbey, 77.
 Ostrich shell beads from Nineveh, 147.
 OXFORD: All Souls College, letter of fraternity issued by, 216 ff. Ashmolean, volume presented by John Aubrey to the, 58; prints of John Blaggrave's instruments, 65. Bodleian Library, John Blaggrave's Astrolabium Uranicum Generale, 64; letters of fraternity, 179, 194, 196, 201; stained-glass figures of St. Thomas Becket, 38 ff. Lewis Evans collection, model of John Blaggrave's Familiar Staffe in the, 63; drawing of Blaggrave's monument in the, 71 *n*. Merton College, 103-4 *n*.

P

- Pacher, Michael, panel-painting of St. Thomas Becket by, 42.
Pageants representing the martyrdom of St. Thomas Becket, 44.
Paintings of St. Thomas Becket, 31, 34, 35, 39 *n.*³, 43, 53.
Paintings, panel-, of St. Thomas Becket, 40-3, 51.
Paintings, wall-, representations of St. Thomas Becket on, 31, 35, 39-40, 51-3.
Palace of Ashurnāšīrpal revealed at Nineveh, 103, 105.
Pall, figures of St. Thomas Becket on an embroidered, 31.
Pallets, 22.
Panel-paintings of St. Thomas Becket, 40-3, 51.
Pareto, Antonio da, letter of fraternity by, 190.
Paris: Louvré, Limoges châsses in the, 49 *n.*².
Paris, Matthew, drawing of St. Thomas Becket, 51.
Parry, Gambier, work on the roof bosses of Tewkesbury Abbey, 67, 73, 74, 75, 80, 81.
—, Major E. Gambier, on his father's work, 74.
Parthian pottery from Nineveh, 138.
Partizan, the, as a practical weapon, 20.
Passion, instruments of the, represented in the roof bosses of Tewkesbury Abbey, 78.
Pauldrons, impractical, 23, 24; Italian, 220, 221.
Pauli, Professor Georg, 54.
Pavements found at Nineveh, 103 *n.*¹, 104, 105, 106.
Pefenhauser, armourer, 27.
Pentecost represented in a roof boss of Tewkesbury Abbey, 83.
Percyvale, Walter, admitted to fraternity, 181.
Perowne, Victor, 54 *n.*
Pewter ampullae, representations of St. Thomas Becket on, 46.
Picinino, armourer, 27.
Pickering, William, armourer, 27.
Pickering (Yorks.): St. Peter's, wall-painting of St. Thomas Becket in, 52, 52 *n.*¹.
Pilgrims' signs, representations of St. Thomas Becket on, 32, 46 *n.*².
Pipe (musical instrument) represented in a roof boss of Tewkesbury Abbey, 77.
Pisanello's St. George, armour of, 23.
Pitcher, Sydney, 78.
Pithoi from Nineveh, 137.
Planisphere, Celestial, John Blagrove's, 65, 66-7.
Plaque, steatite, from Nineveh, 109.
Plate armour, 23-4.
Ploket, Alan, work on Corfe Castle by, 100.
Pole, Cardinal, seal of the Prerogative Court of, 45.

- Pole-axe, the, as a practical weapon, 20.
Portico, a, of the Temple of Nabû, Nineveh, 108.
Pottery, Celtic, 4-5; from Nineveh, 103, 103 *n.*¹, 105, 107, 108, 116-17, 135-40.
Precession Tables, John Blagrove's, 66.
Premonstratensian letters of fraternity, 186-7, 197, 208.
Prerogative Courts, seals of, 45.
Preston Church (Sussex), wall-painting of St. Thomas Becket in, 52 *n.*¹.
Prisms from Nineveh, 103, 106.
Privy, a, in the Temple of Nabû, Nineveh, 106.
Psaltery represented in a roof boss of Tewkesbury Abbey, 77.

Q

- Quartz bead from Nineveh, 147.
Quatremayns brass, armour shown on the, 23.
Queen Mary's Psalter, figures of St. Thomas Becket in, 36, 39.

R

- Raphael, Oscar C., 12, 103 *n.*¹.
Reade, John, 63.
Reading: church of St. Laurence, grave of John Blagrove in the, 56.
Relics of St. Thomas Becket, 48, 51 *n.*⁴.
Reliefs of St. Thomas Becket, 32, 39 *n.*³, 43, 46-7.
Reliquaries, figures of St. Thomas Becket on, 34, 39 *n.*³, 46, 48-50.
Resurrection, the, represented in a roof boss of Tewkesbury Abbey, 82-3.
Retables, representations of St. Thomas Becket on alabaster, 43 *n.*
Rete, the, of John Blagrove's Mathematical Jewel, 59.
Rich, Edmund, archbishop of Canterbury, counter-seal of, 45.
Richard II, work on Corfe Castle by, 92.
Riemenschneider, Tilman, effigies by, 220.
Robert, Duke of Normandy, imprisoned in Corfe Castle, 86.
Robert, Prior of Belvoir, letter of fraternity issued by, 180.
Roman lamps from Nineveh, 138.
Rome: English College, paintings of St. Thomas Becket in the, 35, 53; Lateran, embroidered cope in the, 47; —, Limoges chässe in the, 49-50 *n.*
Roof bosses in the nave of Tewkesbury Abbey, 73-84.
Ros, Beatrice, letter of fraternity to, 190.
Rouen Museum, alabaster panel in the, 47.
Rouncival Hospital (Charing Cross), letters of fraternity issued by, 197, 198, 200.

- Rule, the, of John Blagrave's Mathematical Jewel, 59.
 Rutland, Duke of, letter of fraternity in the possession of, 179.
 Rüttschi, A., collection, Limoges chässe in the, 49-50 *n.*
 Rydbeck, Professor Otto, 46 *n.*³
 Ryther, Augustin, 65.

S

- Sabaton, the, in armour, 220.
 Sacro Speco (Subiaco), a fresco of St. Thomas Becket in the, 31.
 St. Albans Cathedral, wall-painting of St. Thomas Becket in, 31.
 St. Albans, monastery of, admissions to fraternity in the, 180.
 St. Anthony's Hospital (London), letters of fraternity issued by, 196, 197, 202-3, 204.
 St. Bartholomew's Hospital (Gloucester), letters of fraternity issued by, 196.
 St. Benet Holme, admissions to fraternity at, 181.
 St. Christopher and St. George, gild of (Rome), letter of fraternity issued by, 198.
 St. Clement in St. Clement Danes, letters of fraternity issued by the gild of, 198.
 St. Cornelius, Fraternity of, in St. Margaret's Westminster, letters of fraternity issued by the, 198.
 St. Cross (London), letter of fraternity issued by, 198.
 St. John, R., letter of fraternity to, 187.
 St. John Baptist (N. Newington), letter of fraternity issued by the chapel of, 196.
 St. John of Beverley, gild of, letter of fraternity issued by, 198.
 St. Margaret's Chapel (Uxbridge), letter of fraternity issued by the, 196, 198, 216.
 St. Mary, in the church of St. Botolph (Boston), letters of fraternity issued by the gild of, 196, 198, 205, 216.
 St. Mary-in-the-Sea (Newton), letters of fraternity issued by the gild of, 196, 215-16.
 St. Mary of Bethlehem Hospital (London), letters of fraternity issued by, 196, 198.
 St. Mary Rouncival Hospital, letters of fraternity issued by, 197, 198, 200.
 St. Sepulchre, Hospital of (Lincoln), letters of fraternity issued by the, 198.
 St. Thomas Acon Hospital (London), letters of fraternity issued by, 196, 198.
 St. Thomas's Hospital (Rome), letters of fraternity issued by, 194, 195, 197, 214.
 Salamanca, church of San Tomás Cantuariense, 29.
 Sallade or sallet, the, type of helmet, 16, 24, 230-1, 235.
 Salvatore, San, church of, Bologna, painting of St. Thomas Becket in the, 35.
 Salvyn, John, admitted to fraternity, 181.
 S. Spiritus de Saxia Hospital (Rome), letter of fraternity issued by, 195, 198, 199.
 Sands, Harold, 100, 102.
 Sanseverino, the armour of, 23.
 Sargon, bricks of, 124; restoration of the Temple of Nabû by, 104, 105, 106.
 Sassanian objects from Nineveh, 107, 138.
 Saucer from Nineveh, 137.
 Sauerlandt, Dr. Max, 54 *n.*
 Scenes from the life of our Lord represented in roof bosses of Tewkesbury Abbey, 79-83: the Ascension, 83; the Betrayal, 81-2; the finding of the Child Christ, 80-1; Christ's entry into Jerusalem, 81; the Circumcision (?), 80; the Coronation of the Virgin, 83; the Crucifixion, 82; the Last Supper, 81; the Magi, 80; the Nativity, 79; Pentecost, 83; the Resurrection, 82-3; the Scourging, 82.
 Schevitch collection, Limoges chässe in the, 49 *n.*²
Schnabelkannen, Celtic, 2-3.
 Scott, C. M. Oldrid, on the report of the roof bosses of Tewkesbury Abbey, 74, 75.
 Scourging, the, represented in a roof boss of Tewkesbury Abbey, 82.
 Sculpture from Nineveh, 105, 107, 109.
 Seals, English medieval: the dating of, 149-51; the epigraphy of, 149-78; lettering, the, used on, figured, 166-74; list of, illustrated, 175-8. Nineveh, from, 148. St. Thomas Becket, representations of, 30, 39 *n.*,³ 44-5.
 Sebastian, St., representations of, on armour, 227.
 Secular clerks, letters of fraternity issued by, 194, 216-17.
 Sempringham, Order of, letter of fraternity issued by the, 180, 187.
 Sennacherib, the *Agammu* (pool or reservoir) of, 114-16; bricks of, 125-6; house built by, 103, 110; prisms of, 103, 111; sculpture of, 107.
 Sens Cathedral, statue of St. Thomas Becket in, 32; figures of St. Thomas Becket in the stained glass of, 38; — on an embroidered mitre in the Treasury of, 47; — on a Limoges chässe in the Treasury of, 48; painting of St. Thomas Becket in, 53.
 Serpentine bead from Nineveh, 147.
 Seusenhofer, Conrad, armour by, 27.
 Shafts in the Temple of Nabû, Nineveh, 105.
 Shamshi-Adad, bricks of, 123.
 Shawm represented in a roof boss of Tewkesbury Abbey, 77.

- Shells from Nineveh, 148.
Shetelig, Dr. Haakon, 46 *n.*¹
Shield, inconvenience of the, 24.
Shutt, Francis, 53 *n.*
Sigismund Tirol, armour of, 22.
Silver coins from Nineveh, 107.
Silver-work representations of St. Thomas Becket, 39 *n.*³, 48 *n.*, 50.
Silvestro, San, painting of St. Thomas Becket in the church of, Venice, 31.
Simpson, Frank, 54 *n.*
Skepptuna (Uppland, Sweden), church of, coming of St. Thomas Becket from the, 32.
Slab, inscribed, from Nineveh, 103 *n.*¹
Sladen, Percy, Memorial Fund, 103 *n.*¹, 103-4 *n.*
Slashed armour, 27, 241.
Smith, A. Hamilton, 48 *n.*
Smith, Dr. Campbell, 148.
Smith, Canon E. F., 84.
Smith, John Hugh, 12.
Smith, Reginald A., 'Celtic Bronzes from Lorraine,' 1-12.
Society of Antiquaries, objects in the possession of: casts of seals, 30; letters of fraternity, 191, 196; Limoges chasse, 49.
— Research Fund, 103 *n.*¹
Sollerets, practical and unpractical, 22-3.
Spear, the, as a practical weapon, 20.
Speco, Sacro (Subiaco), a fresco of St. Thomas Becket in the, 31.
Spitzer collection, Limoges chasse in the, 49.
Spoleto: church of SS. Giovanni e Paolo, wall-painting of St. Thomas Becket in the, 51.
Splints armour, 24.
Stables, the, of Corfe Castle, 91.
Staffe, Familiar, John Blagrove's, 62-3.
Stained glass figures of St. Thomas Becket, 34-8.
Stamnoi, Celtic, 1-2.
Statue from Nineveh, 109.
Statues of St. Thomas Becket, 32, 35, 32 *n.*³
Steatite objects from Nineveh; beads, 148; plaque, 109.
Stephen, St., a wall-painting of, 31.
Stern, Ludwig, 54 *n.*
Stixwold charters, the, 179 *n.*²
Stockholm: Historical Museum, carving of St. Thomas Becket in the, 32; Storkyrka, group of St. George and the Dragon in the, 32.
Stoke Charity church (Hants), wall-painting of St. Thomas Becket in, 35.
Stoke d'Abernon (Surrey), wall-painting of St. Thomas Becket formerly in the church of, 35-6.
Stone objects from Nineveh, 103 *n.*¹, 117-21.
Stoneleigh church (Warwick), wall-painting of St. Thomas Becket in, 52 *n.*¹
Stow (Lincs.): St. Mary's church, wall-paintings of St. Thomas Becket in, 39.
Stratford-on-Avon (Warwick): chapel of the Trinity, wall-painting of St. Thomas Becket in the, 52-3.
Sulhampstead Abbots (Berks.), wall-painting of St. Thomas Becket at, 52 *n.*¹
Sword, the, as a practical weapon, 20, 25-6; in representations of St. Thomas Becket, 34, 35.
Symbols, evangelistic, represented in the roof bosses of Tewkesbury Abbey, 79.
Symphony (musical instrument) represented in a roof boss of Tewkesbury Abbey, 77.
Szarvasy, F. A., 12.
- T
- Tablets from Nineveh, 103 *n.*¹, 108, 126-35.
Tabors represented in roof bosses of Tewkesbury Abbey, 77, 78.
Tassets, the use of, in armour, 220, 223.
Tattershall, figures of St. Thomas Becket on brasses at, 34 *n.*²
Temple of Ishtar, Nineveh, 103 *n.*¹, 105.
Temple of Nabû, Nineveh, excavations on the, 103-48.
Tewkesbury Abbey, the roof bosses in the nave of, 73-84; representations on, of: angels, 76-9; evangelistic symbols, 79; God the Father, 83; instruments of the Passion, 78; musical instruments (*q. v.*), 76-8; scenes from the life of our Lord (*q. v.*), 79-83.
— Library, MSS., etc., relating to the Abbey in, 73.
Thelisford Hospital, letters of fraternity issued by, 197.
Theobald, abbot of Cîteaux, letter of fraternity issued by, 179.
Theobald, archbishop of Canterbury, seal of, 30.
Thomas, chief prior of the Order of Sempringham, letter of fraternity issued by, 187.
Thomas, Dr., 148.
Thomas, St., Becket, of Canterbury, the iconography of, 29-54.
— representations of, in: alabaster, 43 *n.*, 47; brasses, 32, 34; a carving, 32; a drawing, 51; embroideries, 31 *n.*², 47; enamel-work, 34, 38, 48-50; engravings, 53; etchings, 34; glass, stained, 34, 35, 36-8; illuminations, 36, 40, 50-1; ivories, 47; metal work, miscellaneous, 45-6; mosaics, 30; paintings, 31, 34, 35, 39 *n.*³, 43, 53; —, panel, 40-3, 51; —, wall, 31, 35, 39-40, 51-3; pilgrims' signs, 32, 46 *n.*²; reliefs, 32, 39 *n.*³, 43, 46-7; seals, 30, 39 *n.*³, 44-5; silver-

- work, 39 *n.*³, 48 *n.*, 50; statues, 32, 35, 39 *n.*³; woodcuts, 47-8.
- Thompson, R. Campbell, and R. W. Hutchinson, 'The Excavations on the Temple of Nabû at Nineveh', 103-48.
- Thompson, Yates, 51.
- Tiglath-Pileser I, bricks of, 122.
- Timbrel represented in a roof boss of Tewkesbury Abbey, 78.
- Tirol, Sigismund of, armour of, 22.
- Titchfield monastery, letter of fraternity from, 187.
- Tod, Mr., 140 *n.*
- Tomás Cantuariense, San, church of, 29.
- Tomlin, J. R. le B., 148.
- Toy, Sidney, 'Corfe Castle: its history, construction, and present condition', 85-102.
- Treswell, Ralph, drawing of Corfe Castle by, 93, 95.
- Trinitarian Friars, letters of fraternity issued by, 192-3, 197, 200, 212-13.
- Trönö church and cathedral (Sweden), Limoges chasses in, 49, 49 *n.*²
- Tukulti-Ninurta inscribed slab, the, 103 *n.*¹, 117-18.
- Turner, Professor H. H., 67.
- U
- Ugolini, Luca dei, letter of fraternity to, 189.
- Uranical Astrolabe, John Blagrove's, 55, 64-70.
- Urbino, painting of St. Thomas Becket in the Duomo at, 31.
- Utrecht: Archiepiscopal Museum, Limoges chässe in the, 49 *n.*²
- V
- Vambraces, impractical, 24.
- Vase, Celtic, 4-5; from Nineveh, 138.
- Verney, Isabella, admitted to fraternity, 181.
- Vernun, William de, letter of fraternity to, 183.
- Vessels, Celtic bronze, 1-12.
- Vienna: Figdor Collection, ivory in the, 47; Kunst-historisches Museum, armour in the, 220.
- Virgin, the coronation of the, represented in a roof boss of Tewkesbury Abbey, 83.
- Visor, forms of the, 26, 234-5.
- Viti, Timoteo, painting of St. Thomas Becket by, 31.
- W
- Waking church (Essex), letter of fraternity to, 191.
- Wall-paintings, representations of St. Thomas Becket on, 31, 35, 39-40, 51-3.
- Walsoken hospital, letters of fraternity issued by, 194, 195, 196, 198, 215.
- Walter, Hubert, archbishop of Canterbury, seal of, 44-5.
- Walters, H. B., 138 *n.*⁶
- Waltham: Holy Cross monastery, letter of fraternity of, 180.
- Wareham, Archbishop, seal of the Prerogative Court of, 45.
- Warwick, Richard Beauchamp, earl of, effigy of, in armour, 18.
- Weapons, in relation to armour, 20; —: bill, 20; firearms, 25; long-bow, 20; partizan, 20; pole-axe, 20; spear, 20; sword, 20, 25-6.
- Well, the, of the Temple of Nabû, Nineveh, 106.
- Wellow church (Hants), wall-painting of St. Thomas Becket in, 52 *n.*²
- Wells cathedral, statue of St. Thomas Becket in, 35.
- Westley Waterless (Camb.), armour from, 17.
- Whaddon church (Bucks.), wall-painting of St. Thomas Becket in, 52 *n.*¹
- Whaite, H. C., 32 *n.*², 52 *n.*²
- Whetham, John, letter of fraternity granted by, 194.
- White Canons, letters of fraternity issued by the, 186-7.
- William, Abbot, of Westminster, 182.
- William the Good of Sicily, 30.
- Wilson, Major, 103-4 *n.*
- Winchester: church of St. John, wall-painting of St. Thomas Becket in, 52 *n.*¹; Magdalen Hospital Chapel, wall-painting of St. Thomas Becket in, 52 *n.*¹
- : hospital of St. Cross, wall-paintings of St. Thomas Becket in the, 39.
- Wine coopers, the patron of, 31.
- Wine-vessels, Celtic, 1.
- Wismar (Mecklenburg), panel-painting of St. Thomas Becket in the church of St. Jürgen at, 42.
- Wistowe, William, admitted to fraternity, 181.
- Wood carving of St. Thomas Becket, 32.
- Woodcuts of St. Thomas Becket, 47-8.
- Woodward, A. M., 140 *n.*
- Woodward, W. H., 54 *n.*
- Wootton Bassett church (Wilts.), wall-painting of St. Thomas Becket in, 52 *n.*¹
- Worcester, the *Liber Albus* of, 182.
- Wright, Benjamin, engraver, 64, 65.
- Wyke, Prior John de, 182.
- Y
- Yarmouth, Great (Norfolk); St. Nicholas, wall-painting of St. Thomas Becket(?) in, 52 *n.*¹
- York minster, figures of St. Thomas Becket in the stained glass of, 37.
- York museum, ampulla in the, 32.
- Z
- Zenitfer, John Blagrove's, 65, 67-9.
- Zigāti from Nineveh, 180.

